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THE

BRITISH MEDICAL JOURNAL,

BEING THE

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED FOR THE ASSOCIATION BY

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BRITISH MEDICAL JOURNAL:
BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY DR. MARKHAM.

LONDON: SATURDAY, JANUARY 5, 1861.

A Lecture
ON URINARY CALCULI.

BY

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General Consideration of the Subject. Animal Matter in Calculi. Of the Concentric Layers of Calculi. Of the Classes of Urinary Calculi, and of the Chemical Examination of Calculi. Tests kept in Small Bottles with Capillary Orifices. CLASS I. *Calculi which leave only a Trace of fixed Residue after Exposure to a red Heat. Uric Acid Calculi; Chemical Characters. Calculi composed of Urates; Chemical Characters, Uric Oxide, Xanthic Oxide, Xanthine. Cystic Oxide or Cystine. Fibrinous Calculi. Fatty Concretions.* CLASS II. *Calculi which leave a considerable Quantity of Fixed Residue after Exposure to a red Heat. Oxalate of Lime Calculi; Chemical Characters; Calculi composed of Earthy Phosphate; Chemical Characters. Carbonate of Lime Calculi. Silicic Acid Calculi. Prostatic Calculi. Summary of Chemical Characters of Calculi. Of the Origin and Formation of Urinary Calculi, and of the Nature of the Nucleus. On the relative Frequency of the Occurrence of the different Calculi. On the Treatment of Calculous Disorders, and of the Importance of Detecting the Tendency to the Formation of Stone at an early Period. On dissolving Calculi in the Living Body.*

GENTLEMEN,—We have now to consider some points in reference to urinary calculi. As there are several substances in healthy urine which possess but a slight degree of solubility, and as, in certain derangements of the physiological actions of the body, these compounds are formed in much larger proportion than in health, while other matters not present in healthy urine, and not readily soluble in water, are sometimes formed, you would readily infer that from time to time some of these matters would be slowly deposited in the insoluble form while the urine yet remained in the bladder, or before it reached this organ. It is very interesting to consider the nature of the various conditions which are likely to lead to the formation of calculi, and it is instructive to study the condition of the system in relation to the particular form of insoluble matter that may be deposited. If we were accurately acquainted with the mode of deposition of calculous matter, it is very possible that we might lay down such rules for the guidance of patients in whom this tendency existed as would prevent the formation of the stone, or retard its increase, if already formed. You must not always look for the cause of the deposition of a calculus in the characters of the urine; for it is possible that the urine may be healthy while a stone is forming, and that the changes taking place on the surface of the stone itself may cause the precipitation of insoluble substances. Remedies which act on the kidney in many cases exert no influence upon the formation of a stone. It is very important to study the chemistry of the body carefully; and you will often find that the tendency to calculous disorder is not unfrequently explained by deranged chemical changes, which may perhaps be materially modified by attending to the action of the alimentary canal and skin, altering the mode of living, and administering the salts of the vegetable acids, alkalies, mineral acids, or mere diluents in large quantity, according to the nature of the case.

In those cases in which the deposition of the calculous matter mainly depends upon the state of the urine being unfavourable for holding certain slightly soluble matters in solution, it follows that the tendency to deposit may be averted, if the condition of the urine can be altered. It is possible that at one time an acid state of urine may favour the precipitation of uric acid; while, after a short interval, its characters may become so altered that it tends first to dissolve the uric acid, and then to precipitate phosphates, which are insoluble in an alkali. The latter salts are soon deposited on the uric acid, and protect it from the further solvent action of the alkali.

Animal Matter in Calculi. Calculi often consist of many different constituents; but usually one predominates greatly over the rest, and the calculus is named accordingly. Even the purest calculi composed of earthy salts contain, nevertheless, a certain quantity of organic matter; and those which seem to consist of organic material only, contain a certain proportion of earthy salts. A certain amount of animal matter is deposited with the hard material, and in many cases serves to agglutinate the particles together. After the hard matter of the stone has been dissolved, this animal matter may be seen in the form of a translucent, granular, mucus-like mass. Upon microscopical examination, sometimes the remains of delicate fungi can be detected in this matrix, and very frequently dumb-bells of oxalate of lime, or fragments of them, are found. The fungi were formed during the formation of the calculus; and it is possible that the reaction developed during their growth may have exerted an influence upon the precipitation of the insoluble matter.

The hard calculous matter may consist of substances which exist in healthy urine, like phosphates and uric acid, slowly deposited from their weak solution in the secretion; or of materials which are not present in perfectly normal urine, such as oxalate of lime, cystine, etc.

Of the Concentric Layers of Calculi. The insoluble material is deposited in distinct layers, which can often be readily detached and separately examined. These layers are easily demonstrated by making a section of the calculus, which can, except in the case of the hardest and most brittle calculi, be readily effected as follows. The calculus is to be sawn through with a fine sharp saw. The cut surface is next to be ground smooth, by being rubbed down upon a smooth flat hone with water. When it is perfectly even, it may be washed, and allowed to dry. Lastly, the cut surface is to be varnished; and now all the different layers will be seen most distinctly. If the calculus be very brittle and hard, unless it be sawn through with a diamond wheel, it is better to grind away one-half without attempting to saw through it. Small calculi are very easily ground and polished, and often furnish very instructive specimens.

The concentric layers are often of different colours, of different degrees of hardness, contain various proportions of organic base, and are of different chemical composition. Each ring forms the section of a layer, and a portion of each may be detached and chemically examined separately. Some of these layers are deposited quickly, others more slowly; and they therefore vary considerably in hardness. In examining a calculus, it will therefore be necessary to subject a small portion of several layers separately to examination.

Seldom can any definite crystalline form be made out, except upon the surface of the concretion; and, upon examining small portions of a calculus in the microscope, nothing but a great number of crystalline fragments, exhibiting concentric layers, can usually be distinguished. Sometimes the material is deposited in little spherical masses, which become incorporated. Although distinct names are assigned to different forms of calculi, a concretion entirely composed of only one substance is seldom met with.

Of the Classes of Urinary Calculi, and of the Chemical Examination of Calculi. For convenience of description, calculi may be arranged in two classes, according to the relative proportion of the organic matter and inorganic salts present. The *combustible*, or *almost entirely combustible* calculi, are those which leave very little residue after exposure to the action of a red heat on platinum foil; while the *partially combustible* or *incombustible* calculi leave a considerable proportion of fixed residue.

I. *The first class* will include calculi composed of uric acid, urates of ammonia, soda, lime, and magnesia, and the rare forms of uric or xanthic oxide calculi, fibrinous and blood calculi, and those consisting of cystine.

II. *The second class* will contain the oxalate of lime or mulberry calculus; the calculi composed of various phosphatic deposits; that consisting of carbonate of lime, very rare in the human subject, but not uncommon among the lower animals; and the silicic acid calculus.

The first preliminary test to which a portion of calculous matter of unknown composition is subjected, consists in exposing it to the action of a red heat. When reduced to a fine powder, a little is placed upon a piece of platinum foil, and heated in the flame of a spirit-lamp. If a carbonaceous mass remain, it is to be exposed for some time to a red heat, until it is entirely dissipated, or until nothing but a white ash remains.

If it be almost entirely dissipated, the original powder is to be tested for uric acid, urates of soda, lime, ammonia, or cystine, according to the method described for testing for these substances occurring in the form of urinary deposits.

If the powder be incombustible, or only partially combustible, it is to be tested for phosphate of lime, triple phosphate, and oxalate of lime, by the methods indicated. (See Tables.)

Tests kept in Small Bottles with Capillary Orifices. Let me direct your attention to a very convenient plan of keeping reagents, which is not only applicable to the subject now under consideration, but will be found of great advantage in all cases in which only a very small portion of matter is to be subjected to examination, particularly in ascertaining the chemical characters of substances which form the subject of microscopical inquiry—in fact, the plan of examining the chemical composition of a substance which I am about to describe may be termed not inaptly *microscopical testing.* A chemist may carry his laboratory in his pocket; and the physician may take all the apparatus necessary for the most complete qualitative examination he is ever called upon to make, in a space much less than that now usually occupied by the urinometer, spirit-lamp, and acid-bottles.

These little test-bottles which I now show you may be kept in a case. When we proceed to test a small portion of calculous matter, it is to be powdered, and placed on a glass slide. The cap is removed from the test-bottle containing the appropriate reagent, which is then inverted, and its capillary extremity placed near to the matter or drop of solution to be tested. The warmth of the hand expands the air contained in the bottle, and a drop of the liquid is expelled.* (*How to Work with the Microscope, The Microscope in Practical Medicine.*)

In this way, a drop of an unknown solution can be readily subjected to the action of several tests, and indications of the presence of certain substances may be obtained as clearly as if much larger quantities were operated on. In testing for carbonates, the powder or solution may be lightly covered with a piece of thin glass, and the acid subsequently added; the slightest effervescence becomes at once clearly perceptible; and, if necessary, the specimen may be subjected to microscopical examination, and thus the smallest disengagement of air-bubbles can be detected.

CLASS I. *Calculi which leave only a Trace of Fixed Residue after Exposure to a Red Heat.*

Uric Acid Calculi. Nearly two-thirds of the calculi in the museums of this country consist in great part of uric acid. They vary very much in size. Sometimes small calculi are found in great number in the kidney. For the most part, the uric acid is deposited in the first instance in the kidney itself; and not unfrequently the small concretion becomes impacted in the lower part of the uriniferous tubes or infundibula, and gives rise to great irritation, until it becomes released, and passes down the ureter into the bladder. It may now pass off by the urethra; or may remain in the bladder, when layer after layer is added, until it attains a considerable size.

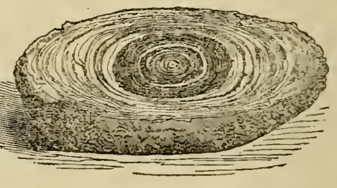

Fig. 53.—Uric acid deposited upon a smaller calculus composed of oxalate of lime.

The uric acid calculus is usually of an oval form, but somewhat flattened on two of its surfaces. It is sometimes quite smooth externally, sometimes rough, or covered with a number of rounded projections. It is generally of a brownish hue, varying from a pale fawn colour to a dark brownish red. Dr. Rees met with one specimen in which the nucleus was quite white, and was composed of pure uric acid destitute of colouring matter. Its consistence is usually hard, and its texture compact. It breaks up into small angular pieces. I have examined many small uric acid calculi, and in several instances have found that the nucleus consisted of matter insoluble in potash, which polarised readily; and, in some specimens, well defined dumb-bell crystals of oxalate of lime were discovered. In some few cases, the nucleus probably consisted originally of mucus or some soft matter, which after a time had shrunk and nearly dried up, leaving a space or cavity in the centre of the calculus; but, even in these, matter insoluble in potash and acetic acid exists. Very generally, dumb-bells of oxalate of lime form the nucleus of uric acid calculi. The uric acid calculus is often coated with phosphates. The irritation of the calculus, according to Dr. G. O. Rees, excites the secretion of an abnormal quantity of alkaline fluid from the mucous membrane of the bladder, which causes the earthy phosphates to be precipitated from their solution in the urine. If ammonia were set free by the decomposition of the urine, it is possible that a little of the uric acid calculus might even be dissolved; but this would soon be prevented by the deposition of earthy phosphate upon the surface. The phosphates are not *secreted* in increased quantity by the mucous membrane of the bladder, as was formerly believed, but are precipitated from their solution in the urine.

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* These test-bottles are to be obtained of Mr. Matthews, Portugal Street, Lincoln's Inn. Some are fitted up in a box, with appropriate apparatus for examining urine.

Chemical Characters. Insoluble in boiling water; soluble in potash. From the alkaline solution, crystals of uric acid may be obtained by adding excess of acid. The murexide test may be applied. (See Uric Acid.) When heated on platinum foil, it evolves an odour of burnt horn. Carbonate of ammonia and hydrocyanic acid are among the products of decomposition. The small amount of residue which remains after the ash has been exposed to a red heat for some time, consists principally of phosphates and carbonates of soda and lime.

Calculi composed of Urates. These calculi usually contain urates of soda, ammonia, and lime; and not unfrequently small quantities of oxalate of lime are deposited with the urates. This calculus is in great part soluble in boiling water, and gives off ammonia when heated with a strong solution of bicarbonate of potash. Dr. Prout states that it is principally met with in children, and is usually small in size, of a pale brown colour. Layers of urate are often found in uric acid calculi.

Chemical Examination. After treating the calculus with boiling water, the insoluble matter is to be separated by filtration. This may consist of oxalate of lime and phosphates. If only a little boiling water has been added, the urate will be deposited as the solution cools. The solution is to be tested as follows. Acetic acid precipitates the uric acid. Filter, evaporate the solution to dryness, and expose the residue to a red heat. Carbonate of soda and carbonate of lime remain. The last may be obtained by solution in acetic acid and precipitation as oxalate.

Uric Acid, Xanthic Oxide, Xanthine. These names have been given to a rare form of calculus, which has only been found in man on three occasions. It is not soluble in water; it is hard, of a yellowish brown colour, and the surface can be polished by friction. Scherer has found xanthine in the liver and spleen, in muscle, and in blood. It is closely allied to uric acid, and also to hypoxanthine, which only differs from it in containing two atoms more of oxygen.

Cystic Oxide, Cystine. This form of calculus is of a pale greenish colour; its surface is smooth, and there are no indications of concentric layers. The fracture is glistening, and the structure is semitransparent.

The chemical characters of this calculus are the same as those of cystine.

Fibrinous Calculus. This form was first noticed by Dr. Marcet, and it appears to consist entirely of an elastic organic substance closely allied to fibrine. It is said to resemble yellow wax in its appearance. It dissolved in potash, but was precipitated by excess of acid. It was insoluble in water, alcohol, and ether; but was dissolved by acetic acid, with the aid of heat. In this solution, ferrocyanide of potassium produced a precipitate. It left very little fixed residue after exposure to a red heat.

Blood-Calculi. Dr. Scott Alison furnishes the following interesting remarks with reference to a case in which he discovered some blood-calculi in the kidney. (*Archives of Medicine*, vol. i, p. 245.) In examining the body of a man named William Solly, who was admitted into the Consumption Hospital, Brompton, under the care of Dr. Cursham, on August 23rd, and who died on the 30th of the same month, the left kidney was found by Dr. Alison to be greatly atrophied and changed in structure, while the infundibula and pelvis were stuffed with hard bodies, most of which were of a coal-black colour. "The black calculi occupied the pelvis, while the infundibula were tenanted with a few calculi of a whitish grey colour, with one exception small in size, about the magnitude of pear-seeds, and wanting the ordinary physical characters of phosphate of lime. One calculus, which occupied an infundibulum, is the size of a horse-bean, looks somewhat worn and disintegrated, and at one point resembles a piece of decayed wood. At one side it is black, from the presence of altered blood. It is very light in weight, and is composed of blood and phosphate of lime. The black calculi, which form the chief point of interest in the case, were about six in number, and ranged from the size of a coriander-seed to that of a small horse-bean. When found, these black calculi were tolerably hard; but, being friable, they partly broke asunder in handling. The fractured surface varied a little in colour, in some parts presenting a dark rusty tint." Liquor ammoniæ dissolved them; they were capable of partial combustion. The microscope revealed only amorphous particles; but Dr. Owen Rees, with the assistance of a neutral saline solution, discovered forms which he considered to be the remains of blood-corpuscles.

The kidney was remarkably altered. It was very small, but retained somewhat of the normal shape. It weighed only an ounce and a half, and was only two inches in length. Its colour was drab; its consistence was firm and fibrous. At one extremity only could any natural cortical or tubular structure be found. The organ resembled a sac with thin irregular walls. The lining membrane appeared healthy. The renal artery was small, thickened, and scarcely admitted a common probe. The ureter was small, but less out of proportion than the artery. The investing membrane could not be separated from the other parts with which it was connected.

"The atrophy of the kidney in this case was probably brought about by the production of inflammatory action, set up perhaps by the presence of small calculi of phosphate of lime. Blood was probably effused in consequence, and, from suppression of urine, remained in the infundibula and pelvis, and failed to be washed down the ureter. This blood hardening would form the calculi which were discovered. After the abatement of the supposed inflammatory action, degenerative processes would supervene, and lead to the remarkable atrophy and change which the kidney presented. The duties of this altered kidney would be thrown upon the other; but, as the system was much wasted by disease, no increase of size would result.

"Only a very imperfect history of the patient could be obtained, he being very exhausted when he came into hospital. Since his death, inquiries have been made for information, but with little success. He was fifty-two years old, and by trade a painter. He had been ill with cough two years, and his feet and legs became œdematous only two weeks previous to his decease. No information could be obtained respecting his having suffered from calculi in the bladder, or from hæmaturia; but it is right to mention that no member of the family of the deceased could be found."

Fatty Concretions. These have been already alluded to under *Urostealith* (Lecture VIII.) Specimens of urine which contain large lumps of hard fatty matter will sometimes be brought to you for examination, and you should be aware of the fact that these are almost invariably cases in which the fat has fallen into the urine accidentally, or has been placed in it for the express purpose of imposing upon us. Quite lately I have seen two such specimens, which were said to be cases in which concrete fatty matter had been passed in the urine. In these, however, the fat was ordinary suet, as was proved by the presence of the fat-vesicle, white and yellow fibrous tissue, and fragments of vessels.

[*To be continued.*]

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

CASES OF CHOREA.

By C. Handfield Jones, M.B., F.R.S., Physician to the Hospital.

Case i. J. S., aged 17, male, plumber, was admitted February 26th, with chorea pretty severe; tongue rough and white; pulse excited, weak. He has been affected two months, in consequence of fright at seeing a man hang himself. He had chorea three years ago. The right side is most disordered. Treated at first by carbonate of iron and cold douche, subsequently by liquor potassæ arsenitis, he got gradually better; but the influence of remedies was not marked.

Case ii. E. M., aged 16, female, admitted April 12th with chorea, which at first affected the right side most, but had become general. She used to start and wake up at night in fright. Catamenia regular; bowels regular. No worms. Some psoriasis on lower lip. Treatment for fourteen days by liquor potassæ arsenitis, without advantage; afterwards by one-twentieth of a grain of strychnia three times daily, under which she got well in five or six weeks.

Case iii. E. C., aged 12, female, was about six months under treatment for psoriasis, in the course of which chorea showed itself, affecting the right leg and arm. Under liquor potassæ arsenitis and an issue in the right arm, both disorders got well.

Case iv. H. L., aged 10, male, was admitted April 16th with severe chorea; "is not still a moment". He had been ill fourteen days. Liquor potassæ arsenitis was given for a week, and castor oil. Lichen urticatus then appeared. Half a grain of ammonio-sulphate of copper was given three times daily.

April 30th. No improvement. Eruption same. One-twenty-fourth of a grain of strychnia was given thrice daily; this was continued, after fourteen days, four times a day till July 9th, when both chorea and eruption were much improved. He ceased attendance August 20th, when he was free from chorea, but had still some eruption.

Case v. C. W., aged 12, female, was admitted Nov. 24th. She had been ill three weeks with marked chorea. Circulation languid. She was treated by the carbonates of iron and ammonia, with valerian; and was cured in about a month.

Case vi. E. W., aged 13, female, was admitted Dec. 29th. Ill four weeks. The left side is affected; the arm feels weak, and twitches at times; and the three inner fingers feel numb, and get contracted. The leg is at times jerked out; it is less strong than the other. The mouth is occasionally drawn to the left; speech altered. Memory not so good as formerly; is very forgetful and languid. Head giddy this morning. No catamenia yet. Treated at first by carbonate of ammonia, ammonio-citrates of iron, infusion of valerian; and subsequently by strychnia and tincture of sesquichloride of iron. By Feb. 13th she was well enough to be discharged.

Case vii. W. C. P., aged 18, male, was admitted April 23rd, with chorea affecting right side, arm, leg, and face. Speech interfered with. Bowels regular. He had been ill three weeks. Treated by carbonate of ammonia, ammonio-citrate of iron, tincture of henbane, infusion of valerian; subsequently by strychnia and quinine. He improved under both, but was not well when he ceased attendance.

Case viii. E. H., aged 11, female, was admitted March 7th, with chorea affecting chiefly arms and hands. Till 28th, she had mistura ferri composita; afterwards strychnia, increased gradually from one-sixteenth to one-eighth of a grain thrice daily. Shower-bath for part of the time. She was almost well by April 25th.

Case ix. Ph. C., aged 8, female, was admitted Oct. 26th, with marked chorea, not more on one side than the other. Cannot feed or dress herself. Fright was said to be the cause. Treated with benefit till Nov. 23rd by one twenty-sixth of a grain of strychnia thrice daily, and saccharated carbonate of iron; afterwards by citrate of iron and quinine and tincture of nux vomica.

Nov. 23rd. She was said to have lost the use of her right arm, leg, and side, for a week (having been without medicine the same time). She had regained the use of the arm; but the left had become affected, as well as her speech.

Dec. 17th. Has benefited much; speech is regained; and she is much more steady.

Case x. L. H. L., aged 8, female, was admitted Dec. 13th. She had been ill ten days. A healthy child, not anæmic. Skin cool; pulse weak; bowels regular; appetite very good. Has most marked chorea of both sides, which came on suddenly while returning from school. Is quiet while asleep, as regards movements; but at night cries, and is semi-delirious, not conscious where she is. She cannot sit in a chair without being fastened to it. Heart's action very excited; a loud sytolic mitral murmur, and perhaps a basic. Never had rheumatism, or anything like it. Urine rather high coloured and thick.

Dec. 24th. Much improved, sleeping a great deal better. Choreic agitation still very marked; heart's sounds as before.

Jan. 24th. Is quite steady; walked to hospital.

April 4th. Discharged in very fair health; heart's sounds same. Treated by citrate of iron and quinine, liquor potassæ arsenitis, with tincture of nux vomica and cod-liver oil, with occasional aperients.

Case xi. Same girl readmitted July 18th, having relaped about fourteen days. Movements not steady. Loses her speech at times, and bursts into fits of crying, after which she is better. Appetite bad; bowels right. One-thirty-second of a grain of strychnia was given three times a day.

Aug. 1st. Is quite steady, but loses her speech four or five times a day. One-twenty-eighth of a grain of strychnia thrice daily.

Sept. 4th. Is quite steady, and her speech is good. One-eighteenth of a grain of strychnia and seven minims of tincture of sesquichloride of iron were given thrice daily.

Dec. 29th. Good colour. Is very fairly well. Breath not short; she runs about.

Case xii. M. H., aged 11, female, was admitted Oct. 24th. She had been ill two months. Right side, arm, and leg, said to be partially paralysed. Drags her leg; cannot hold anything with right hand. Tongue drawn to one side. Pulse quick; pupils very large. Sleeps well; appetite good. From one-twenty-fourth to one-twentieth of a grain of strychnia; ten to fifteen minims of tincture of sesquichloride of iron; four minims of chloric ether; and one minim of hydrochloric acid, were given in half an ounce of water thrice daily.

Dec. 19th. Is quite recovered.

Remarks. Of the above twelve cases (one being a relapse), nine were females, three males. As to age, three were between the ages of 5 and 10 years, six between 10 and 15, and three between 15 and 20. All were under my own care, except Case viii; and they are all that I have recorded among a total of 2500, which gives a proportion of 1 to 208, a smaller than might have been expected, considering the great prevalence of nerve-disorders. In only one case was there complication with cardiac disease, the mitral valve being affected; and in this it seems clear that there was no prior attack of rheumatism. If the cardiac disease, at any rate, was of rheumatic character, it must have been the sole manifestation of the disorder. In some of the cases—vi, ix, and xii—the nerve-affection had as much the appearance of paralysis as of convulsion, the loss of power being the more conspicuous phenomenon. This seems to me a very interesting observation, and highly significant as to the real nature of the disorder. Another noteworthy circumstance is the tendency to onesidedness in the chorea, reminding one of the results of organic disease. From these and other observations, I am satisfied that separate nervous centres may be the seat of local functional disorder, just like individual nerves. We may as well have a neurosis of one hemisphere as of one sciatic nerve. For want of such knowledge, two most eminent authorities in the profession treated a case of transitory hemiplegia connected with ague by bleeding and mercurialisation.

All the cases were treated by nervine tonics of one kind or other; purgatives being sparingly employed, only to remove constipation, or to correct faulty secretions. In eight cases, strychnia was used, and seemed more or less beneficial in all. In Cases ii, iv, viii, xi, it was undoubtedly the main cause of the improvement. A combination such as was used in Case x may often be advisable. In acute cases marked by extreme excitability and involuntary jactitation, sedatives are unquestionably indicated; but they can only obtain a temporary advantage, and it is to tonics that we must look in the great majority of cases for a real cure.

With regard to the essential nature of chorea, it seems to me that we shall not be far from the truth if we keep in mind the well established law, that usually mobility and debility of nervous tissue go hand in hand, that the weak structure is unduly sensitive and excitable. To determine the exact seat of the affection is not possible; and very probably it is not confined to any one locality. It is much more important to know the state of the nervous structures; and this, it seems pretty certain, is one of debility and exhaustion. This is the radical and necessary condition; but the causes which produce it may be very various. In the majority of cases, the nervous tissue falls of itself into a state of enfeeblement, or is reduced to it by ordinary influences, as bad air, poor food, depressing emotions, etc. In other cases, the impairment of nervous energy depends on worms or accumulations of fæces in the bowels, which, on the principle of inhibitory action or morbid stimulus, depress and enchain the nerve-force. In other cases, possibly some poison, by circulating in the blood, may conditionate the state of nerve-debility. The treatment must, of course, vary according to the presumed cause.

The connexion between chorea and rheumatism seems to be in some degree elucidated by viewing the latter as a disease in which the nervous system is materially involved. Without denying that acute rheumatism may depend on the presence of lactic acid in the blood, it yet seems clear that the ordinary inflammations of rheumatism manifest peculiarities which can scarcely be accounted for except by the intimate concernment of the nervous system. Rheumatic affections shade, in fact, from the most decided severe, local, pus-generating inflammations of pericardium or lungs, down to mere neuralgia with little or no vascular disorder. The more fugitive and shifting they are, the more of the nervous element one traces in them. This is not the place to discuss at length the arguments for this view; but if it be admitted that a state of paresis of the nervous system is common both to chorea and rheumatism—in one the cerebro-spinal department being affected, and in the other the vaso-motor—we have at once an important relation established between them. The inflammations of rheumatism might result from the mere paralysis of the articular vaso-motor nerves, without the presence of lactic acid in the blood; or, assuming that this is essential, its injurious effects might be greatly intensified by this nerve-disorder, or even developed in cases where otherwise they would have remained wanting.

HULL GENERAL INFIRMARY.

REPORTS OF CASES.

[Reported, with Remarks, by C. J. Evans, Esq.]

I. ABSCESS OF LUNG FROM PRESENCE OF FOREIGN BODY: EVACUATION THROUGH BRONCHIAL TUBES AND THROUGH THORACIC WALLS: RECOVERY.

George Johnson, aged 26, a blacksmith by trade, was admitted, under the care of Sir Henry Cooper, on April 5th, 1860, in a state of great debility and exhaustion. He was emaciated, and had an anxious countenance; and expectorated a large quantity of pus. There was a swelling at the level of the seventh rib on the left side, about four inches from the sternum, the integument over it being thinned and livid, with fluctuation—evidently an abscess on the point of bursting. He enjoyed good health up to the end of 1859. At that time he swallowed, during a meal, a portion of bone from a sheep's head, about half an inch long by one quarter broad. He was choked by it, and went immediately to a surgeon, who could not feel the bone, and did not remove it. He brought up a little blood at first; and cough, attended by expectoration, followed. A few days after swallowing the bone, he expectorated pus, which gradually increased in quantity. At the end of a month, as he got thinner and weaker, the expectoration of pus continuing, he put himself under the care of a medical man, and remained under treatment up to the time of his admission into the Infirmary. During all this period (two months or more), he expectorated pus to the amount of a pint every twenty-four hours; and most of the time he was confined to his bed. About six weeks after swallowing the piece of bone, he ejected it during a violent fit of coughing, to which attacks he had become subject. A month before admission, he felt a pain in his left side; and a swelling made its appearance, and gradually increased in size. He was seen by Sir H. Cooper in consultation a short time afterwards, when the abscess in the side had presented itself.

On admission, the right side of the chest was healthy; on the left side the natural respiratory sounds were audible about halfway down, the region of the abscess and parts immediately surrounding presenting dulness on percussion, and absence of respiratory sound. There were no signs of tubercle in either lung. He was ordered to take an ounce of expectorant mixture three times a day, and a pill containing half a grain of muriate of morphia every night; and to have a linseed-meal poultice applied to the side.

April 6th. He expectorated a large quantity of pure pus. One-third of a grain of opium was given in a pill every six hours.

It was considered not advisable to open the abscess with a lancet. In a few days, it opened spontaneously, and discharged copiously; but the pus evacuated in this way was thinner than what was expectorated. At the same time, the sputa became less abundant; these, and the discharge from the side, evidently bearing a relation to each other. The natural respiratory murmur was now to be heard much lower down on the left side.

April 12th. His condition generally had much improved; he slept well, his appetite was good; the expectoration was less copious, and he was gaining flesh. He was ordered to have the opium pill every night, and full diet.

He continued to progress favourably and steadily through the month of April, all expectoration at last ceasing, and the opening in the side healing over; he also became much stouter, and was discharged cured on May 10th.

Remarks. This interesting case furnishes good evidence of the *vis medicatrix naturæ;* the patient having had but little medical treatment, at least during his stay in the hospital. The history and the symptoms point also to the following conclusions: that the piece of bone became obstructed in a bronchial tube of the left lung rather low down, and set up inflammation followed by abscess, which discharged itself through the bronchial tubes and trachea; that, the abscess either being near the exterior of the lung, or not finding sufficient vent for the evacuation of its contents through the bronchial tubes, another point of exit was made through the walls of the chest, the discharge in one direction being vicarious of that in the other; and further, all the evidence went to prove that it was a true abscess of the lung, caused by the presence of a foreign body, and not the result of tubercular deposit.

II. CHRONIC SYNOVITIS OF KNEE-JOINT: METASTASIS OF INFLAMMATION TO PLEURA, AND RAPIDLY FATAL RESULT: AUTOPSY.

Richard Cooper, aged 35, was admitted, under the care of Dr. King, on February 1st, 1859, with inflammation of the synovial membrane of the left knee-joint, of some weeks duration. There was a moderate amount of swelling, and great pain on pressure on the inner side of the joint. A linseed-meal poultice was applied, and two calomel and colocynth pills given at night, and an aperient draught in the morning.

Feb. 2nd. The pain in the joint was very severe. Five leeches were applied to the knee.

Feb. 5th. The pain had somewhat abated since the application of the leeches. A large blister was applied, and an ounce of castor oil was given.

Feb. 6th. He complained of feeling very poorly, and had vomited some greenish bilious fluid. The tongue was inclined to be dry; he had slight cough, but no expectoration. An ounce of nitrate of potash mixture was given every four hours.

6 P.M. There had been a return of the vomiting; pulse frequent. The countenance was anxious; the respiration hurried. He complained of a sharp pain under the right lower ribs; and every now and then called out loudly with a severe shooting pain in the region of the diaphragm. There were some indistinct mucous râles to be heard on the left side of the chest. He was ordered to take the mixture every two hours; to have six leeches applied to the epigastrium, and a blister to the left side; also to take, every three hours, a pill containing a grain of calomel and a grain of opium.

Feb. 7th, 3 A.M. He was much worse. Pulse small and feeble; countenance sunken. The violent pain in the region of the diaphragm continued at intervals. The pain and swelling of the knee had quite subsided. Two drachms of chloric ether, and the same quantity of compound spirit of ammonia, were added to the mixture. Wine was ordered to be given *ad libitum.* He gradually sank, and died at 10 o'clock, A.M.

AUTOPSY. The right pleural cavity was full of pus, and contained flakes of quite recent lymph. There was also a little purulent fluid in the pericardium. The heart itself was healthy. The upper part of the left lung was quite consolidated, and the lower part much congested. It was so firmly adherent to the walls of the chest by old and strong adhesions, that it could not be removed without being torn. The other organs were not examined.

III. SERIOUS FRACTURE OF RIBS: FRACTURE OF CLAVICLE: RECOVERY.

James Leigh, aged 37, a strong, robust man, was admitted under the care of Dr. Lunn on November 27th, 1859, at 8 P.M., with another man (the subject of the next case) both having been crushed between a vessel and the side of the pier. On examination there was found to be a fracture of the middle of the left clavicle; comminuted fracture of two or three of the upper ribs on the left side near the sternum; and separation of several of the lower ribs on the same side from their cartilages, or of their cartilages from the sternum. The crepitus here was not rough and coarse, but soft, as if produced by cartilaginous surfaces rubbing against each other, and was so evident as to be heard every time an inspiration was taken. There was no other injury except a contusion of the left thigh. A broad flannel bandage was bound firmly round the chest, a few turns passing over the clavicle to keep it in position. He was ordered to take occasionally an ounce of a mixture containing ʒij of ipecacuanha wine, ʒj of tincture of opium, and ℥viij of camphor mixture.

Nov. 28th. He had no sleep at night; and had expectorated a little bloody mucus.

Nov. 29th. He passed another bad night. Face much congested; pulse full and frequent; breathing laboured. He was bled to nearly twenty ounces, and in the evening, he felt much relieved; his pulse was quick, but softer; the face much less congested; and the breathing easier. No expectoration. The bowels were confined. Crepitation was audible all over the upper part of the left lung; the sounds of the right lung were natural. A grain of calomel and three grains of Dover's powder were given every three hours.

Nov. 30th. He passed a much better night. The expectoration was muco-purulent, untinged with blood.

Dec. 3rd. His bowels were much relaxed; respiration hurried; pulse frequent; his gums were sore. He was ordered to omit the powders; and to take every three hours an ounce of an eight ounce pectoral mixture, containing a grain and a half of tartar emetic.

Dec. 6th. He did not sleep well, but in other respects was improved. Five grains of Dover's powder were ordered to be taken every night.

Dec. 9th. The crepitation was gradually diminishing in the left lung, and being replaced by the natural respiratory sounds. He was ordered to take an ounce of compound benzoin mixture three times a day; and to have two ounces of gin daily.

Dec. 30th. He had now no cough nor expectoration. He gained his strength rapidly, and was discharged cured on January 19th, 1860.

IV. SEVERE FRACTURE OF THE RIBS: EXTENSIVE EMPHYSEMA: DEATH: AUTOPSY.

John Punkey, aged 59, a Prussian sailor, was admitted into the Infirmary at the same time with, and under the same circumstances as, the man whose case is above related; but he was more seriously injured. His body was cold and wet from his having fallen into the water, and he was almost in a state of collapse.

On examination there was found to be a dislocation forwards of the sternal end of the clavicle; several fractured ribs on the left side with extensive emphysema, this existing all over the chest and abdomen. There was also a severe injury of the right elbow-joint, the exact nature of which could not be made out; but the condyles of the humerus appeared to be separated from each other, and the ulna driven up between them. There was, further, a long and lacerated wound on the outer side of the left thigh. On account of the severe injury to the chest and the extent of the emphysema, it was thought best not to encircle the chest with a roller; but hot fomentations were applied to the whole chest and abdomen. Stimulants were given, and means taken to restore the warmth of the body.

Nov. 28th. He had had no sleep. The surface of the body had attained its natural warmth. The emphysema had extended to the neck and to the scrotum. The only sound audible on applying the stethoscope was the crackling sound caused by the air in the cellular tissue. The ipecacuanha and opium mixture was ordered as in the last case.

The same treatment was continued through the next day; but he gradually sank, and died on the 30th. There was no expectoration throughout.

Autopsy, twenty-one hours after death. The sternal end of the clavicle was found to rest entirely on the upper bone of the sternum, the interarticular cartilage being carried with it. The left pleural cavity contained a pint or more of bloody fluid. The lung was collapsed, and almost black. On its posterior surface were two lacerations, neither of them large. The third, fourth, fifth, sixth, and seventh ribs on this side were broken near their angles, projecting sharply and roughly into the pleural cavity. The sixth rib was also separated from its cartilage. The fourth and fifth ribs on the right side were broken about midway between the sternum and their angles. The pleura on this side was not injured, and the lung itself was healthy. Both condyles of the humerus were broken off; but there was no other injury, the radius and ulna being intact and in proper position.

Original Communications.

ON THE TREATMENT OF THE LOCAL IRRITATION CAUSED BY CONTACT WITH CERTAIN SPECIES OF ACALEPHÆ.

By Edward Headlam Greenhow, M.D.

The perusal of Dr. Barker's paper, in the British Medical Journal of December 22nd, 1860, on the production of urticaria by handling the larvæ of some kind of insect, suggests to me the publication of an almost forgotten bit of experience, which, perhaps, throws some additional light upon the subject he has so well inaugurated, and may not be unacceptable to some of our maritime associates. It also, I think, definitively negatives the supposition that the troublesome affection of the skin caused by touching some kinds of acalephæ is altogether attributable to mechanical irritation.

Having formerly passed some years on the sea-coast, it used to happen that I was sometimes consulted by persons who had been stung whilst bathing by some of the acalephæ with which the ocean abounds at certain seasons. The immediate effect produced by touching the filaments of one of these creatures is a sensation of stinging, which extends up the affected limb for some distance from the point of contact. Presently the part becomes red, swollen and tender; and occasionally, especially in young females and children, the entire limb in the course of an hour or two becomes much swollen, red, and exceedingly painful. The redness and swelling sometimes terminate in a well defined border resembling that of a wheal, but in other respects the ailment does not bear any resemblance to urticaria. These symptoms usually subside spontaneously, if allowed to do so, in the course of three or four days, but meanwhile they often cause considerable suffering, render the affected limb more or less useless, and as they have a formidable appearance, often produce needless anxiety, especially to persons unacquainted with the nature of the injury. Having previously found spirits of hartshorn, when applied early, a very effectual application for preventing the irritation caused by musquito bites, I was led to try an alkaline and stimulating lotion, consisting of a solution of bicarbonate of potass, sesquicarbonate of ammonia, and spirit of hartshorn, in these cases, with a most satisfactory result. I do not recollect the exact form of the lotion, but believe it consisted of one drachm of each of the salts, and half an ounce of spirits of hartshorn to six ounces of camphor mixture. This application, if freely used soon after the injury, affords almost immediate relief; and although the benefit is more tardy if it be not applied until the effect of the injury has been thoroughly developed, yet even then its use rarely fails speedily to mitigate the suffering and swelling, and to remove them almost entirely in the course of a few hours.

London, December 22nd, 1860.

FOREIGN BODIES IN THE AIR-PASSAGES.

By George Padley, Esq., Surgeon, Swansea.

The following two cases of the above-named accident occurred to me in 1855. As the subject appears to have attracted more attention of late than formerly, and as the cases themselves contain, I think, some points of practical interest worth recording, I now forward them for publication. I have abstained from doing so at an earlier period, in order that I might watch the progress and result of one of them, and report, after a long interval of time, the effect, if any, of the accident, and of the serious consequences which followed it, upon the future health of the patient.

Case i. I was sent for April 6th, 1855, to attend Master J. P. M., a delicate boy, about 8 years of age. He was suffering from active febrile disturbance, pain in the posterior part of the chest, cough, and dyspnœa. There were unmistakable auscultatory signs of pneumonia below the inferior angle of the right scapula. The fever assumed a remittent form, the patient being better in the morning, the paroxysms returning each day about noon, and continuing the rest of the day. Copious perspirations broke out, especially at night. He became extremely weak and emaciated; and had, in short, the general characters of acute phthisis, with hectic fever. During the progress of these symptoms there were clear indications of the formation of abscess in the lung, in the situation above-named—dulness on percussion over the seat of pain, gurgling, with pectoriloquy and mucopuriform expectoration. The apices of the lungs were quite free, and there was no evidence of pulmonary affection in any other part. The period comprised in this description extended from April 6th to the third week in May.

During this period, at first antimony, with salines, dry cupping, and subsequently blisters over the affected part, formed the treatment, under which the more acute inflammatory symptoms subsided; afterwards, cod liver oil, chiefly by frictions, as the stomach would not bear it, together with steel tonics and counter-irritation. The boy improved somewhat under this treatment; and in about a month was taken out in a chair, or for a gentle walk. The hectic and other symptoms, however, continued, and his case was looked on as extremely precarious.

The age and spare condition of the patient were favourable to stethoscopic examination; and the physical characters were well marked, and quite corresponded with the symptoms, so that the diagnosis—circumscribed abscess of the lung—was not difficult, and was pronounced before the following unlooked-for event confirmed its accuracy, and sufficiently explained the cause of the disease, and the imminent danger to which it had reduced the patient.

Early in June a severe paroxysm of coughing occurred, followed by free puriform expectoration. This in a short time subsided. Two hours afterwards he was taken to see a day exhibition of a panorama; and, while somewhat excited by the scenes displayed, was seized with a violent choking cough, and filled, as I was informed, four or five pocket-handkerchiefs with the abundant expectoration that followed. He was taken home much exhausted, but shortly recovered. The same evening, while laughing at the gambols of some children, he suddenly sprang up with a feeling of suffocation, grasped his throat, and appeared for the moment on the point of choking. Immediately afterwards he brought up a substance, with some matter and a little blood, exclaiming, "There's what I swallowed." This was followed by an abundant puriform discharge, described as equal to a large cup-full. Making every allowance for an exaggerated estimate, I should think, from the account given, that he must have brought up about a pint of matter that day, during the three periods mentioned. The substance ejected proved to be portion, an inch and a quarter long, of a japanned metallic penholder, which had passed into the air-passages the previous February, but which he and his parents, to whom he mentioned it at the time, supposed he had swallowed. After giving him a little medicine, nothing more was thought of the circumstance, in the belief that the substance had been carried away; and there being no idea that it was in any way connected with the symptoms which afterwards appeared, it was not mentioned to me.

I was now informed that about the middle of February he was biting the penholder, when the end broke off and slipped down his throat. He was immediately seized with a violent paroxysm of coughing. After this subsided he had occasional fits of cough, increased on lying down in bed, and in the morning, with but little expectoration. It so continued for a few days, gradually getting less troublesome. At the same time there was an uneasy sensation about the right mammary region, more evident during laughing, etc., and some difficulty of breathing. He continued in this way, but little interrupted in his usual pursuits, or affected in his health, until April, about seven weeks after the occurrence of the accident, when he was attacked by the febrile and other symptoms I have described; the pain in the chest being not only increased in severity, but situated lower down and more posteriorly than it had been.

After the expulsion of the substance he progressed most favourably; the cough and expectoration diminished, and his health rapidly improved.

Near the end of July, after some exposure, he had a return of symptoms—pain in the same part, dyspnœa, puriform offensive expectoration, from which he did not recover for about five weeks. He had a second relapse, with similar symptoms, but to a less degree, about one year afterwards; and again, but still more slightly, the beginning of 1859, *i.e.*, after an interval of more than two years, the pain being each time at the same spot. He has been free since that time from any return, beyond a slight pain in the part after "taking cold." I examined his chest a few months ago. The percussion sound at the affected part was not quite so clear as on the opposite side, and there seemed a little roughness in the breathing, especially during deep inspiration. He now (November 1860) takes active exercise, there does not appear any shortness of breath, and his general health continues good.

Case II. Dennis Keefe, while holding a shilling and a sixpence in his mouth, accidentally let the latter fall back, and it was drawn by a sudden inspiration into the trachea. After the first efforts of coughing he became more quiet; but, feeling the sixpence still in the throat, he came to me about midnight in great alarm. By forcible expiration the coin was driven upwards and excited cough; he could feel it moving in the trachea, and afterwards passing down into the right bronchus; the sound of its movement could, at the same time, be heard through the stethoscope. There was but little distress in the breathing. I prepared the patient's mind for tracheotomy, but thought I would first try inversion of his body. For this purpose, placing the legs of one end of a long stout kitchen-bench upon the sofa, I directed the patient to lie back upon the inclined plane thus formed, supported by his knees, which were flexed over the upper end, the body being thus in the *supine* position. No sooner had he done so than he felt the sixpence pass through the glottis into his mouth. He immediately rose up, chiefly by his own effort, the knees acting as a fulcrum, and dropped the coin into his hand.

Remarks. This form of accident appears, as I have stated, to have attracted more notice lately than in former years. This arises probably, not from its greater frequency, but from its more ready recognition in cases the symptoms of which were formerly ascribed to other causes. It was stated by Mr. Porter that "many children were carried off by this accident who have been supposed to die of croup"; and even now, as Dr. Watson observes in relation to the subject, "it is more than probable that fatal cases happen, the nature of which escapes detection." The first of the cases here given forcibly illustrates the latter observation. If it had proved fatal without the expulsion of the foreign body, and no *post mortem* examination had been allowed; or if the substance had been lost sight of in the copious expectoration, and the patient had died, as most have done, from the disease it had set up—it would have been recorded as a case of pulmonary abscess, the result of lobular pneumonia—how or why induced there would have been no means of ascertaining. There is little doubt that other cases have occurred in which the origin of disease thus induced has been involved in mystery, which might have been cleared up if this possible cause had occurred to the mind. Such a case, for example, is that related by Dr. Duncan (*Lancet* 1845), in which a gentleman suffered from troublesome chest-symptoms, varying in intensity, for four years. The source of all the mischief was a piece of bone which had passed into the trachea during dinner. It had produced the usual paroxysm of coughing at the time, with pain below the clavicle, and expectoration of a little bloody mucus. These having subsided, the occurrence was forgotten. The patient, after nearly four years suffering, went to Edinburgh for advice, and was treated for a bronchitic affection without relief. Not long afterwards, during a violent fit of coughing, two pieces of bone were brought up, and the obstinacy of the case was explained. The symptoms were relieved, and the patient recovered. Some of the symptoms here might have excited suspicion in a mind alive to the chance of such an accident; and one question would probably have revealed their true cause. It may be well, therefore, to bear this in mind in cases presenting such symptoms, obstinate in character and obscure in origin, especially in children, and to direct our inquiries accordingly.

Since the article by Dr. Stokes (*Dis. of Lungs*, 1837—about the first systematic account of the accident), many cases have been recorded, extended statistics gathered and tabulated, and an elaborate monograph of above 400 pages published. Among all these, the instances are but rare in which recovery has taken place after phthisical symptoms with pulmonary abscess have supervened, even though the offending substance may have been expelled. Cases of this usually fatal consequence of the accident have become still more rare, now that the importance and success of early relief by tracheotomy have been generally recognised. By far the largest number of cases of the accident recorded of late are those in which this operation has been performed, and the mortality thus reduced to a comparatively small proportion. In one or two recent instances, however, the treacherous mildness of the symptoms, or the long periods of repose following an occasional paroxysm, or the alleviation of acute symptoms by treatment, have lulled the apprehensions of patient and practitioner, and encouraged the adoption of a most unsafe expectancy. It is worthy of notice how short a period may sometimes suffice to set up slow yet fatal disease, as in a case mentioned in Cooper's *Dictionary*, in which the foreign body (a pebble) was expelled through an opening in the trachea three weeks after its admission, yet the patient (a child) died phthisical *eight months* afterwards.

A case was published in the British Medical Journal, Dec. 12th, 1857, somewhat similar to the first I have described, in which a piece of smooth glass, after producing bronchopneumonia of the right, and afterwards of the left lung, with phthisical symptoms, was coughed up after four months and a half. At the above date the issue was doubtful, as the lung was said to be very seriously damaged; and a fear was expressed of a termination in consumption. It would be interesting to know, three years having elapsed, whether this fear has been realised.

In most cases, the intruded substance appears not to have advanced beyond a primary division of the bronchus. In the one I have described it either made its way far into the lung, if we may judge by the change of place and ultimate site of the pain, etc., viz., between the seventh and ninth ribs, and there produced inflammation and abscess in the pulmonary tissue by which it was surrounded; or it may have excited these processes by irritation extending downwards from the bronchus, as in a case by Dr. Gilroy.

Hasse (*Pathol. Anal.*) quotes a case in which the foreign body had penetrated to a position corresponding very nearly with the one I have named, and was there discovered after death. It is that of a girl, aged 5 years, who died twelve months after an iron nail had fallen into the trachea. "The nail was found impacted in the fourth or fifth division of the right bronchus, the lung containing several deposits of pus communicating with the bronchial tubes." This is the only instance I have met with in which the precise situation of the body within the substance of the lung has been indicated. While in the primary divisions of the bronchus it may remain a very long time without producing serious symptoms of pulmonary disease; as in a case related by Dr. Wood, in which a piece of nutshell was coughed up after four years, the local symptoms having been at no time severe, although the general health at one time suffered much. The child recovered. The shell was presumed to have been fixed in the right bronchus. This result does not always follow. Dr. Houston gives an instance in which the right lung was hepatised from a tooth in the bronchus, where it was found after death, which took place in eleven days; and the case by Dr. Gilroy, to which I have referred, is another instance of pulmonic inflammation and abscess thus induced. Much will, of course, depend upon the form and nature of the intruded substance. During the time my patient continued his ordinary pursuits, a period of more than six weeks, the piece of penholder was probably lodged in the bronchus, or one of its primary divisions, as indicated by the uneasiness in the mammary region. It was only when the pain was felt lower down in the infrascapular region that pulmonic symptoms were developed. The case may be considered encouraging, when we reflect upon the extent of disease which must have existed; and with the restorative powers of the cod-liver oil, it is to be hoped that, where abscess from this cause occurs, a more fortunate issue may be expected than has happened in the majority of cases hitherto.

It is remarkable how little appears to have been known respecting these cases so lately as the early part of the present century. It was believed, even by men of eminence, that such an occurrence could not take place and the patient recover. A case is related by Mr. Howship, in his *Practical Observations in Surgery, etc.* (1816), in which a nail slipped into the windpipe of a man (it was distinctly felt by him to do so), and remained in the air-tubes more than four months, producing "incessant irritation, pain, and cough, spitting up of blood and mucous phlegm," until the man was "worn away to a skeleton." Spitting of blood recurred at intervals. He could cover the exact spot of pain with his hand, which was over the lobe of the right lung. In spite of this history, and the symptoms which marked the case, all the faculty who were consulted, among whom were Dr. Pitcairn and Mr. Cruikshank, assured the patient that the nail which "had disappeared from his mouth, must have gone down into the stomach, and passed off through the bowels," feeling convinced (so it was reported of them) that had such an occurrence (its admission into the air-tubes) taken place, it must quickly have proved fatal. They also said that "what he experienced arose from the irritation it produced when in the stomach, but that it was not in the lungs, as he imagined or suspected." Those who were consulted "pronounced the case hopeless"—"he was consigned to certain death." At the end of four months, after copious spitting of blood, the nail was coughed up. This occurred in 1804. In 1815 the man enjoyed pretty good health, with occasional cough, slight spitting of blood, and a painful sensation precisely in the old spot. I have stated some of the particulars of this case somewhat in detail, to show how much in the dark our predecessors appear to have been as to the capabilities of the air-passages to sustain the irritation of foreign bodies, as to the effects of these, and consequently as to the means to be adopted for their removal.

The chief point of interest in Case II is the success which attended the simple proceeding adopted for relief; but it more especially deserves consideration as involving a question of practice which it would be well to have more decisively settled. Mr. Erichsen, in his excellent and comprehensive *Science and Art of Surgery*, observes that "no means short of operation can be trusted. Emetics, sternutations, inversion, and succussion of the body, are all either useless or dangerous, unless the air-passages have previously been opened." This opinion is shared in by Dr. Gross, who speaks of "inversion and succussion of the body as generally hazardous proceedings, unless preceded by an opening in the windpipe"; and the late Mr. B. Cooper has stated that "this mode of proceeding appeared to him extremely dangerous unless an opening were first made in the trachea." Now, there are several instances on record, in which the manœuvre, without previous tracheotomy, has succeeded in causing the expulsion of the offending body, and without giving rise to any untoward symptoms. It becomes, therefore, an important and anxious question, with this weight of authority against the practice, whether, notwithstanding such instances of success, a surgeon would be justified in attempting the same means, and incurring the risks against which such warnings are pronounced. If an opening into the trachea could be safely avoided in any case, it would certainly be a desideratum. The point to be ascertained is, whether, in the case of a coin, for example, or any body whose shape and nature would render it not likely to become impacted in the larynx, the attempt may not with comparative safety be made, the surgeon being prepared to restore the patient to an upright position the instant the expulsive effort has been made, whether successfully or otherwise. The excited spasm would be but momentary. The chief risk would be that of the foreign body remaining in the larynx. Would the degree of such risk be sufficient in any future case to prohibit the trial? In the above case I acted upon the negative of this question, and prepared for tracheotomy if the attempt should have proved unsuccessful, and the effects of it such as to preclude its repetition. The practice also is not without the sanction of eminent names. Mr. Fergusson says "these two examples (referring to cases by Sir B. Brodie and Dr. Duncan) clearly indicate the propriety of trying the effect of change of attitude in such cases." Previous tracheotomy seems not to be implied here; as in one of these cases (Dr. Duncan's) it was not performed. Mr. Liston adopted the plan successfully where a small bullet had passed into the trachea. In some remarks prefixed to a case of Mr. Hilton's (*Medical Times and Gazette*, 1854), after referring to Mr. Liston's case, the following occurs —"It may be concluded then, that in all cases in which the size of the body swallowed is not so large as to preclude the probability of its expulsion, the *first* measure tried should be the shaking of the patient's body with the head in a depending position."

In the statistics compiled by Dr. Gross, inversion of the body alone is said to have been successful in five cases, and it is the only item against which no death is recorded. My patient adds one to the number. It does not appear whether or not the plan was tried in any of the other cases prior to the performance of an operation. It would be interesting, as bearing upon the question, to know this; also, in how many cases the proceeding has not succeeded, and if any fatal result, or impaction in the larynx, has ever followed as a consequence of its momentary adoption. I say momentary; as, unless the plan succeed at once, it would be but little likely to do so after laryngeal spasm has been set up by contact of the foreign body; and to prolong the trial after this would be a hurtful, and perhaps dangerous, proceeding. It is not, therefore, meant in this inquiry to imply a prolonged continuance or frequent repetition of fruitless efforts of this kind, or the adoption of the practice in all cases indiscriminately. With dyspnœa urgent, and the spasmodic cough severe and frequent, an opening in the larynx or trachea should at once be made. The amount of success which has attended these operations should remove all hesitancy or undue procrastination in their performance when the symptoms appear to require it, or when in cases admitting it (assuming it to be admissible in any) inversion has failed after a reasonable trial. The latter would be unadvisable when the substance is known to be of light weight and irregular outline. Such would not be likely by its weight to fall readily through the chink of the glottis, and would by its form be more liable to get entangled in the larynx. Metallic substances are certainly most favourable for inversion; and I should not hesitate to adopt it if a case of the kind again presented itself. Its propriety is more questionable in young children, in whom the aperture of the glottis is smaller, and its disposition to spasm even greater than in older persons. In Sir B. Brodie's case the plan failed. The violent symptoms during the last attempt compelled its discontinuance. On this occasion a platform with a hinge was used, the patient being placed in a *prone* position (the one also spoken of by Mr. B. Cooper as recommended) and secured by a strap across the shoulders. It has occurred to me, on considering the structure and action of the larynx at the rima glottidis, that this (the prone) is not so favourable for the exit of the intruder as the *supine* position. When the rima is relaxed and open—and it is only by taking it suddenly in this state that we can generally hope for success—the base or widest part of the aperture is behind, and it is towards this part that the coin or other substance would tend in the *supine* inverted position of the patient. It would, therefore, when it reached the glottis, be thus more favourably situated for expulsion than in the prone position, in which it would gravitate towards the narrow apex of the triangular outlet. Although, by adopting the supine position, the substance is not so favourably situated for exit through the mouth after passing the glottis, it would be generally found, as in my case, to be readily thrown forward when once expelled from the windpipe. In a case related by Mr. H. Lee (*Med.-Chir. Rev.*, 1856), a boy, into whose trachea a fourpenny piece had passed, was placed upon a counter, and the upper part of his body allowed to fall over the side, while his legs lay across it. Here the *prone* position was that evidently assumed. The experiment was unsuccessful. It produced "such violent coughing, with lividity of countenance," that it was given up. "It was repeated on different subsequent occasions, but always with the same result." The coin was afterwards discharged during a fit of coughing and sickness.

Another advantage of the supine position is that the patient can raise himself by his own effort, which his natural instinct would impel him to do the instant laryngeal spasm was produced.

Dr. Watson mentions two cases (Drs. Duncan and Halford's) in which inversion answered (without tracheotomy); but the position, prone or supine, is not stated. In both it was a shilling that entered. After tracheotomy, prone inversion would, perhaps, be best, so as to favour expulsion through the wound, if the substance should fail to pass the glottis. If, however, the easier operation of laryngotomy be performed, as recommended by Mr. Lee, in order, not so much to allow of the exit of the substance through the wound, as to prevent spasmodic closure of the glottis, and thereby enable it to pass through the natural opening when the body is inverted—then, if the view here taken be correct, the supine position would be the one most likely to attain that end.

In some cases of doubtful diagnosis, this proceeding would probably assist to clear up the doubt. Such an instance, I think, was that already quoted from the British Medical Journal, in connection with Case i, in in which, from the comparative quiescence of the patient, a doubt existed in the mind of the surgeon as to whether a foreign body was in the air-passages or not.

In explaining the much more frequent entrance of foreign bodies into the right than into the left bronchus, Dr. Stokes, while properly attributing the chief influence to the position of the septum between them, also mentions "another explanation, founded on the different directions of the two tubes, the *right* being *more vertical* than the left," and the statement is repeated in the *Lectures* of Dr. Watson. This does not seem correct anatomy. The right bronchus, passing off directly into the lung, takes a nearly transverse course. The left, having to descend beneath the arch of the aorta, has to take a more vertical direction in order to reach its destination. The point is, perhaps, of but little moment, yet worth correcting, especially when endorsed by such eminent names. Mr. Bryant, in the last number of *Guy's Hospital Reports*, says that when a foreign body has passed into the bronchi, the *left* is its most common seat. This is not, I believe, in accordance with general experience.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

[*Continued from p.* 993 *of volume for* 1860.]

V.—Operations on the Eye.

I have arranged the operations on the eyes under the fifth general division of my operative cases; but, upon looking over them for the purpose of further classification, I find that they are so numerous that any particular account of each case is quite out of the question. They are probably more in number than all my other operations put together; and since, according to my own experience, the tabular form does not give a reader any inducement to persevere in his studies, I have avoided it, and have written most of them out *seriatim*, as briefly as possible, merely indicating the sex by the letters M and F. Many of the cases may appear trivial to my experienced readers; but they shall be very short, and are comparatively few; for the greater number of the minor ones have escaped any accessible record. I have in these papers been anxious to give a true idea of our surgical proceedings in connexion with a provincial hospital, and have therefore included slight as well as severe, and unsuccessful as well as successful cases.

It is necessary to subdivide my ophthalmic cases into ten groups; and, even with this classification, it has been requisite to omit all the little tumours of the lids, serous cysts, operations for pterygia, and fistula lacrymalis. The groups are, the Extraction of Cataract (in one eye and in two—first the successful, and then the unsuccessful cases); Needle Operations; the Removal of Hard Capsule and Dislocated Lens; the Formation of Artificial Pupil; the Mixed Cases, or those requiring several various operations, which will not allow them to be included under the former heads; Operations for Staphyloma; Strabismus; Extirpation of the eye; and lastly, Operations for Ectropion, Entropion, Trichiasis, and Ptosis.

The period of time in which these eye operations were performed extends further back than the ten years.

Extraction of Cataract. Case clxiv. M., aged about 50. (This was my first cataract case.) Left eye amaurotic from a blow; right lens dull; pupil large and inactive. Made an upper section, which was enlarged with the scissors; and the cataract escaped readily. He was bled in the evening for pain in the head,* and recovered well, and was able to work for years.

Case clxv. M., aged about 60. Double cataract. I operated on the left eye by lower section. He recovered without a bad symptom, and went home in two weeks with excellent sight and an active pupil.

Case clxvi. M. Double cataract, of recent formation; the centre only of the right lens being opaque. I made a lower section of the left cornea, the eye rolling inwards, and the point of the knife catching the conjunctiva. The section was satisfactorily completed. The softer part of the lens was left in the pupil; and, on attempting to remove it, there was a gush of vitreous humour to such an extent that it was necessary to fasten up the eye at once. This I do always in the old fashioned way, with a strip of court plaster and light compress, treating both eyes alike, although only one has been operated on. He made an excellent recovery, and could see to read small print with a two-and-a half inch lens.

Case clxvii. F., aged 75. Double cataract. She said that she lost the sight of the right eye suddenly. I made the upper section in the right eye; but, as the iris flapped in front of the knife, I withdrew it, and completed the section easily with the convex-edged narrow knife. She went on well until the seventh day, when she told me that she could not see, and was very ill. I ordered her a purgative, and the next day she was all right. She recovered with good sight.

Case clxviii. M., aged 60. His left eye was amaurotic, and he had a cataract operation performed some years before by Mr. Estlin, but without advantage. I operated on his right eye by upper section, and a very dark hard cataract was suddenly jerked out upon his cheek. On the fifth day, he struck his eye accidentally; but, with this exception, he went on well. His pupil was drawn upwards to the line of cicatrix, and he was able to see to walk about alone, and ultimately to read. Eighteen months afterwards, this eye also became amaurotic, and the iris tremulous.

Case clxix. M., aged about 60, with double cataract and sunken eyes. Upper section in right eye. He made a fast recovery, and had good sight.

Case clxx. F., aged 58. Had two sisters who became blind from cataract, and recovered their sight by operation. I made the upper section in the right eye, the knife shaving the iris. Soft part of lens removed by a curette from the pupil. Went home on the eighteenth day with good sight, but the eye still weak.

Case clxxi. F., aged 67, a little fat old woman, with sunken eyes and double cataract. Right eye affected two years, and the left nine months. I made the upper section in the right eye, extracting a large hard flat amber cataract. (Mr. Estlin then operated on the left eye.) She went home with fair sight, but with weak eyes.

Case clxxii. F., aged 58. I operated on the right eye, and Mr. Estlin on the left; some vitreous humour escaping with the cataract in the latter eye. She was bled at night for headache, and made a slow recovery; good sight.

Case clxxiii. M., aged 60, a corpulent publican, who had had paralysis. I operated on both eyes at the same time. With the right cataract (upper section from behind), a considerable quantity of fluid vitreous humour escaped. Made also the upper section in the left eye, standing in front of the patient. The cataract escaped with no vitreous humour. The next day, he had a severe attack of gout in the knees; but he recovered his sight in both eyes, and died of apoplexy about eight months afterwards.

Case clxxiv. M., aged 71, an extraordinary old man, who had chorea affecting one side of the body, and paralysis of the other from birth. He was constantly making (involuntarily) the most strange grimaces and contortions of the body, and this he said had continued all his life. He had been married and had a healthy family. It was with great difficulty his head and face could be kept steady. I made an upper section in the right eye, and extracted a dark amber cataract. On the fifth day he opened his eye, which appeared quite strong, and saw to tell the time by my watch in a dull light, and on the sixth day he went home quite well. I never had a case which progressed more quickly.

Case clxxv. M., aged 60. I made the upper section in the left eye standing in front of the patient. Lens escaped readily, and he recovered well, with good sight.

Case clxxvi. M., aged 65. Operated on both eyes, the right by the upper section, and the left by the lower. During the cure, the left lower lid irritated the corneal flap, and rendered necessary two applications of the nitrate of silver to it. Recovered with good sight in both.

Case clxxvii. F., aged 60. Operated on both eyes. In the right the corneal section was small, and the lens showed no disposition to emerge until I had enlarged it with a pair of scissors. She had no very unfavourable symptoms, but her eyes remained weak. She went away, and returned in six months, when I found that she had entropium of both eyes, and prolapsus iridis of the left eye. I took a piece of skin from her lid, and applied nitrate of silver to the prolapsed iris, and she soon recovered and went away with good sight in both. She was also the subject of an immense bronchocele.

Case clxxviii. F., aged 60, a rheumatic subject, liable to headache, with double cataract, sunken eyes, and prominent brows. I operated on both eyes; she had pain in her head at night, but was not bled. When she recovered, she had very good sight in the left eye, and closed pupil and but little sight in the right.

Case clxxix. M., aged 60, lost the left eye by a blow, and the right eye had been getting gradually dim, when he became suddenly blind. I operated on the right, and made a good upper section. He went on well for nearly a week, when pain, especially at night, occurred, and he had severe inflammation of the eye, requiring active leeching. After three weeks, finding the cornea bulging, and the wound not healed, I passed the curette through the white scar, thinking to remove some *débris* of the cataract, but nothing came away, and the eye healed more quickly. He went away with but little sight in this eye; and when I saw him, six months afterwards, he had closed pupil. I cut his iris with the small iris-knife, and he had immediately a new pupil, which became circular, and he went away with a four-inch glass and good sight.

Case clxxx. F., aged 65. Operated on the left eye, making a lower section. He went home with good sight in eighteen days. The pupil was a little drawn down.

Case clxxxi. M., aged 57, whose father was operated on for cataract eleven years before. Double cataract. I operated on the right eye, making the upper section, which required to be enlarged with the scissors. Recovered with good sight, without a bad symptom.

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* In the days of my apprenticeship to the late Mr. Estlin, it was my duty to see all his operative cases in the night, about twelve hours after the operation; and I had the general direction to bleed whenever there was pain in the head, and it always removed it.

Case clxxxii. M., aged 72. Double cataract. Mr. Estlin extracted the right and I the left lens. He had a good deal of inflammation in both eyes, which eventually subsided; and, when he returned home to Wales, his sight was improving, but it was still imperfect.

Case clxxxiii. F., aged 60, had been gradually becoming blind for four years. I made first the upper section in the left eye (standing in front), and enlarged it a little with a scissors, and the lens with a considerable quantity of vitreous humour gushed forth, and it required some management to replace the corneal flap. I then made the upper section in the right eye, and the lens and a small quantity of vitreous humour escaped with a little pressure. He went home well, with good sight in both eyes.

Case clxxxiv. F., aged 50., with fully formed cataract in each eye. I made an upper section in the right eye, and extracted a soft white lens. Went home with good sight.

Case clxxxv. M., aged 60., with long standing cataract in each eye. I operated on the left, and when he recovered, he had good sight; but after a time the capsule became opaque, and the pupil was drawn down. I therefore operated on the right eye with a needle, reclining and breaking up the lens. Some inflammation came on, and he was leeched once or twice; but ultimately the eye recovered completely, and he went home with very good sight.

[*To be continued.*]

Reviews and Notices.

On Diphtheria. By E. H. Greenhow, M.D., F.R.C.P.L., Physician to the Western General Dispensary, etc. Pp. 274. London: John W. Parker and Son. 1860.

Diphtheria is another of the innumerable evidences of the truth of the wise man's dictum, that "there is nothing new under the sun." We are apt to regard this affection (with its modern title) as a *disease of the generation we live in*. A certain indistinct history of the disease, it is true, some years ago came to us from France; but in Great Britain diphtheria was, until lately, little more than a clinical curiosity. The last few years have, we need hardly say, totally changed this disposition of things. We have had to make frequent and painful acquaintance with the disease, to investigate its nature, to look up its history, and to endeavour its arrestment (if this might be). Naturally enough, under such circumstances, our professional brethren have, some of them, made a special study of the epidemic, and have given the profession the benefit of the result of their investigation.

Dr. E. H. Greenhow has thus favoured us; and we are glad that he has done so. The natural tendency of his studies has been in the direction of epidemics, their causes, nature, and special visitations; and we therefore are sure to have in him a satisfactory guide to a knowledge of this epidemic also. For diphtheria is truly an epidemic, even though it be also endemic and sporadic. Like cholera (and here we follow Dr. Greenhow) the disease is no novelty here; it has had its being here ages ago, has vanished, and now has reappeared in this country once again and in the present century. It was described by physicians of former long-past ages; but our fathers and grandfathers knew it not. Aretæus has described it,—so says Dr. Greenhow at least. In the sixteenth and seventeenth centuries it prevailed in Spain, Italy, Sicily, and other European countries. In the middle of last century, it visited England, France, Italy, Sweden, Germany, and even North America. Then it seems to have lain *perdu* for a season, until it again manifested itself about the end of the first quarter of this century. During the last three or four years it has prevailed, in epidemic form, on the Continent, in England, North America, and distant Australia.

Dr. Fothergill gives the first notice of the disease in this country in 1748, in an "*Account of the Sore Throat attended with Ulcers.*" Other physicians of that date also described the affection, Drs. Huxham, Starr, etc.; and the extracts given by Dr. Greenhow from the writings of these worthies, leave little doubt that they had indeed diphtheria to deal with. The history of diphtheria in the nineteenth century dates from Tours, in a communication from M. Bretonneau to the French Academy of Medicine. In fact, to the epidemic in question, Bretonneau first applied the term *diphtherite.* His memoirs on the subject have become, thanks to the Sydenham Society, classical works with us. From Tours the disease seems to have spread over, or to have arisen, in various parts of France. Louis described it in a paper "*On Croup in the Adult.*" The acquaintance of living English physicians with the disease in its epidemic phase, at least, was commenced at Boulogne during its outbreak there in 1855. This epidemic lasted until 1857, and carried off 366 persons, 341 of whom were children under ten years of age. It was said to have especially attached itself to the English residents there; but probably the saying was a mere vague rumour.

In 1856, Dr. Greenhow marks its first appearance in England in Whaplode Drove, in Lincolnshire. It also appeared at Leek and Birmingham about the same time; and it is important to note, that the disease seems to have commenced spontaneously in several centres remote from each other. In London, the first case noticed was in 1857. A curious coincidence here has been suggested; viz., that during this visitation of diphtheria other diseases (especially those of the zymotic sort) assumed a diphtheritic type, and not only amongst men, but also amongst animals. We must not, however, suppose that because the disease has been raging as a true epidemic among our people, that its onset is simply and solely of an epidemic kind. Dr. Greenhow affirms that the records of our medical literature clearly show that diphtheria, like cholera, has always been present with us in a sporadic way, *i. e.*, when not raging as an epidemic. Sometimes it has adhered so pertinaciously to certain limited spots, even to single houses, as to give it an endemic character. He gives numerous illustrations of this peculiar character of the affection; its extension through one part of a poor-law union, for example, and its entire absence in the other part,—a fact which reminds us of the vagaries of the cholera on the opposite banks of a river.

In the days of Huxham and of Fothergill, as in our own, scarlet fever appears to have run hand-in-hand with diphtheria. We must not, however, as some have done, therefrom conclude that there is any actual identity between the two affections, notwithstanding that scarlatina sometimes assumes a diphtheritic character during the prevalence of diphtheria. The sore-throat and albuminuria are the two main symptoms of resemblance between these diseases. But we find them very unlike in other particulars. In scarlet fever a second attack is rare, and usually milder than the first; whilst in diphtheria it is not at all uncommon for a person to be attacked twice, and for the second attack to be more severe than the first. Besides, in pure diphtheria the scarlatinal rash is always absent; and, again, as regards albuminuria, this state occurs at an advanced period of scarlatina, and is a very frequent phenomenon; whereas, in diphtheria it is far from being so common, and, when it is present, occurs at a very early period of the disease. The inflammation of scarlatina rarely extends into the larynx, which it does frequently enough in diphtheria. Anasarca rarely attends diphtheria: and diphtheria has a peculiar list of sequelæ,—partial paralysis of the muscles of deglutition and speech; impairment of vision; paraplegia; hemiplegia; a diphtheritic appearance of abraded surfaces, etc.

There seems plenty of evidence at hand to show that diphtheria is contagious; but how the disease is communicated has yet to be shown. Bretonneau thought that actual inoculation of the morbid secretion was requisite for the purpose; but his opinion is not corroborated by modern experience. Diphtheria is, however, much less contagious than scarlet fever or smallpox.

We cannot follow Dr. Greenhow through the chapters in which he gives details of the symptoms and morbid anatomy of diphtheria. This part of the history of the disease is probably well known to most practitioners of medicine. And we believe also that his views of the treatment are those which are generally held by our profession. There is, however, one rather curious fact worthy of note. The depressing character of this affection, and the usual absence of febrile excitement, are so marked in diphtheria that with practitioners there has been, we may say, no discordance of opinion as to the main line of treatment to be followed. The necessity for the administration of support, and the impropriety of any proceedings in the antiphlogistic way, are written like the letters on the wall for our instruction. And the very same thing seems to have happened in the earlier epidemics. However much the doctors of the past may have differed in matters of detail, their general principles of treatment were just the same as those adopted at this day. We throw out this fact for the consideration of those who resort to that curious invention—a change of type in diseases, to account for the very different modes of treatment followed out, in like diseases, by ourselves and our phlogistic forefathers. The overwhelming and depressing character of diphtheria was as manifest in former days as it is now, so that bleeding, etc., were very clearly contraindicated. In this respect it resembles influenza, cholera, and other like severe epidemics.

External local applications to the throat are, in Dr. Greenhow's opinion, useless; but to this opinion he will probably find many objectors. We quite agree that leeches and blisters are bad appliances; but local warmth we consider very desirable. With regard to applications to the throat internally, we think he does well in stating that much mischief is often done by their severe and injudicious use. It is, probably, only at a very early stage of the affection that heroic applications to the throat are of any service; and of all remedies, the tincture of sesquichloride of iron, more or less diluted, is that which has the best reputation. This tincture, one part in seven of water, sweetened with honey, is a good gargle, says Dr. Greenhow, in the milder sore throats which so often occur coincidentally with diphtheria. Mild detergent gargles may, of course, be always usefully employed for the purpose of washing away loose secretions or deterging the mouth. Tincture of sesquichloride also appears to be the most satisfactory tonic in this disease. But nutriment is manifestly the physician's sheet-anchor here, as in so many other diseases; without its assistance, drugs are in vain.

One common fatal termination of the disease results from its extension into the trachea; the patient dying from suffocation. Death in such cases is often very rapid and sudden; for the shock of threatening suffocation is great, and the smitten frame of the diphtheritic patient is unable to bear any great call upon its strength. Remedies of the drug kind are here not likely to be of any avail; for the patient dies ere their action (for good or ill) can manifest itself. The only hope for aid lies in tracheotomy; and a very broken reed has this operation been to us in this country, "almost always unsuccessful," says Dr. Greenhow. The statistics of other countries give very different results; and we wish our author had lingered a little more on this disputed point of practice. For our own part, we believe that the want of success in tracheotomy (as performed in this country) depends, 1st, upon the fact of our resorting to the operation at a time when there is no reasonable expectation of its being successful; and 2ndly, on the frequent omission of the extreme care requisite in the after-management of the person operated upon. We have never been able to comprehend the shyness of surgeons in the performing of an operation which is *in itself* of very trifling consideration, and which is, under the circumstances of the case supposed, the only possible means by which the life of the patient can be saved. We seem so to dread the operation, that we go on hoping against hope for a favourable turn, and thus delaying,—forgetting all the while that the lungs are becoming momentarily more and more engorged and œdematous. Then, when the operation is at last—and we may say, in desperation—performed, its success is utterly impossible, and for the reason, that the condition of the lungs has now become such as to render the newly admitted air useless for the purposes of life; the power of the organs to appropriate "the breath of life" no longer exists in them. Our author would have done well to have insisted on this point; for we are inclined to believe that this operation of tracheotomy in croup and diphtheria is one which deserves reconsideration, —that it is neglected, without sufficient cause for its condemnation.

We have only been able here to refer to certain of the more prominent facts concerning diphtheria; but we believe we have said enough to recommend this well-written treatise to the attention of the profession.

Transactions of the Epidemiological Society. Vol. i. Part i. Pp. 128. London: Printed by T. Richards. 1860.

The Council of the Epidemiological Society have done wisely in determining on the publication of an annual volume of *Transactions*. Many of our readers will probably remember the high merit of many of the papers which, under the same title as the present work, were published in Dr. Richardson's *Sanitary Review;* and we can assure them that those who shall peruse this first part of a new volume will be well satisfied.

The contents of this part are, the Address of the President, Dr. Babington, delivered Nov. 7th, 1859; the Report of the Diphtheria Committee of the Society; and papers by Drs. B. W. Richardson and G. Milroy, and Mr. R. Clarke.

British Medical Journal.

SATURDAY, JANUARY 5th, 1861.

THE NEW SERIES OF THE JOURNAL.

The alteration in form, which the present number of the British Medical Journal has undergone, will, it is believed, meet with the general approval of the members of the Association. The change has not been made without due consideration, nor without the consent of the leading representatives of the different Branches of the Association. The management of the Journal having, with this present year, passed into other hands than those which have hitherto conducted it, it was thought that the occasion was favourable for the commencing of a New Series of our periodical. The Journal now assumes a more distinctive *facies* amongst its numerous hebdomadal companions, than it has hitherto done—at least of late years; and it also offers itself to the hand of the reader in a more tangible and manageable form. It is to be noted, that the alteration in form has involved no diminution in size; on the contrary, a certain small additional space has been thereby gained.

The promises of assistance in the carrying out of the Journal, which the Editor has received from many different quarters, have satisfied him that the most difficult part of his duties has been already provided for. He has no hesitation, from what he has thus learned, in assuring his brethren of the weekly medical press, who have of late and at various times taken such interest in the welfare of the British Medical Journal that the Association is full of vigour, life, and growth, and requires no nursing at their hands. Indeed, the very marked attention which the Journal has received from the critical hands of its cotemporaries, had already satisfied the Editor of this fact.

The very objection which has been most prominently urged against the Journal—that the issuing of a periodical by a public association is an undue interference with the commerce of the publisher and with trade—forms in our opinion its especial claim upon the consideration of the profession. A Journal which represents no individual interests, which is swayed by no party feeling, which has no commercial considerations to fetter its expressions or qualify its views—is surely a desirable medium for medical intercourse. And if we add to these peculiar advantages, which the British Medical Journal possesses, the other important fact, that it may be fairly esteemed as the mouthpiece of the Medical Profession in this country, we clearly enough establish its position on a firm and satisfactory basis.

Surely we are justified in saying that this Journal may be esteemed as the voice of the Profession. The members of the Association which it represents, belong to every class of our Profession; and every quarter of England owns their presence. They are all banded together in one common purpose—to secure the honour and the dignity of their Profession; to further and advance the Science of Medicine; to enforce upon the Legislature a due acknowledgment of the rights and position of Medicine; and to sustain the position of the Profession against any irregular attacks made upon it by its own members. The power and influence of the Association have already secured for the Profession the attention of the Legislature; and have shown clearly what the value and power of Association are when vigorously brought into action. Of course, such an Association cannot be always actively engaged in the furtherance of some great scheme; but in its periods of repose, it is still ever a watchful guardian of the general interests of the Profession, and is not the less effective for good while it works on in tranquil steadiness, than when its energetic action gains for it a prominent position.

Many ethical and social professional problems have yet to be worked out; and we will venture to say that it is only through the united voice of a great combined Society of this nature that they will ever find their solution. "Man does not live by bread alone;" and we trust that the Journal will continue to be, as it always has been, a faithful exponent of those higher sentiments and feelings which, apart from the mere science and practice of the Profession, are necessary to give grace and credit to our vocation. A British Medical Association reminds us, that we have duties and work to perform beyond the pale of the mere practice of our Profession. In its very existence, it possesses a code of ethics, and by its authority enforces the recognition of the code upon the Profession at large. Its business and its duties are, therefore, clearly enough defined; and we recur to them merely to correct the errors of those, who imagine that the Association has done its work, and who kindly suggest its quiet disembodiment—as a worn out and decrepid thing.

The Association's work will not be nearly completed when the Government has awarded to our Profession its deserts; when society has learned the debt of gratitude which it owes to our body, and has suitably acknowledged the debt; and when the Profession itself has obtained that moral influence, which will enable it to discard from its society all those unworthy members, who tarnish its credit, whether by the adoption of outrageous quackeries, or by the patronage of those who do adopt them. When this happy consummation is attained, the work of the Association will be lightened—yet not completed; for it will still have to hold with watchful care that which it has won, so long as human nature shall be fallible, so long as our profession shall be liable to attacks from without, and to treachery from within. And, even when the profession of legitimate medicine shall stand on a firm and unimpregnable basis, it will be for this Association to foster the ever growing tree of medical knowledge, and, calling the whole profession of the British dominions under its branches, to invite them to partake of its wholesome fruit in security, "none daring to make them afraid."

PROGRESS OF SYPHILISATION.

Through much evil report and some little encouragement, Professor Boeck still maintains his position, as the leading *syphilisateur* of the day. His facts and reasonings have been fiercely attacked; and the very proceeding out of which they arise and with which they are concerned been regarded as doubtful in its morality. Still he nails his colours to the mast. A real believer in these days is a goodly sight. His manifesto this time comes before us in the shape of a pamphlet, bearing date 1860; and of course, therefore, contains his latest *credo* on the subject it treats of—*videlicet*, Syphilisation. Since 1853, he has issued numerous accounts of his success in this surprising art of curing syphilis. "I have," he says, "already proved that syphilisation will cure constitutional syphilis, provided the disease has never been treated with mercury." But his experience has been greatly enlarged during the late years; and now he can boldly tell us: "Syphilisation may be applied with the greatest safety by a systematic method of inoculating, accidents do not happen, and the constitutional symptoms disappear almost without an exception. I hesitate not in affirming, that the discovery has rendered a great benefit to humanity."

Dr. Boeck is amazed that men will not use this healing boon. They regard and judge of it, he says, falsely—arguing most illogically. Moreover, they will not use it aright; and, from their own consequent failures, absurdly condemn syphilisation. "I have," says Dr. Boeck, "often described the right method; but it seems that I must again repeat the *a*, *b*, *c*, of syphilisation, for people cannot yet spell the alphabet of it."

He therefore once again enforces the rules of practice to be followed: Never operate except on persons suffering from syphilis, nor on persons who have taken mercury for their disease. Syphilisation is not to be regarded as the last resource of the despairing doctor, but it is to be the *first* and prime weapon shot at the constitutional affection. Even when iodide of potassium has been let loose upon the enemy, Dr. Boeck objects to follow up the quarry with his favourite remedy. It is right to add, that he has never employed syphilisation as a prophylactic, or introduced the virus into a healthy human frame.

Dr. Boeck appeals to fact; and here is answer to all objectors. He publishes three hundred cases of constitutional syphilis, treated *coram publico* in the Hospital of Christiana, and all of these, excepting ten, he cured. "Is," he asks triumphantly, "syphilisation still a chimera? People object to it because they can't understand its mode of action! In modern medicine, facts are always sought for; but in the case of syphilisation, phrases and not facts are what men ask for!"

Dr. Boeck thus anticipates his ready objectors; but he will, we expect, scarcely satisfy them. Can their phrases, he asks, annul my three hundred facts? Oh! they will answer: Nature can and often does cure syphilis; and besides, syphilis will return after many a long year's disappearance. Then, again, these numerous artificial ulcerations—three new ones every third day for about six months at a pull!—may act as *derivatives*.

From the point of view in which we see this matter, we naturally feel inclined to side with the objectors to this treatment; but, at the same time, we admit that Dr. Boeck's conscientious, and, no doubt, carefully prepared experiments, are worthy of the fullest consideration, and may eventually be corroborated. His conclusions may, at last, enter as received facts into the domain of medical science; but he must not be surprised that they should be sifted and canvassed in a very determined fashion in the meantime. He must expect men to be very sceptical about a treatment which thus scarifies human flesh, and requires so long a time for its effective application. Another curious and difficult question must arise out of such a treatment: what will be its cost to the patient's pocket? That he will be fleeced in skin is clear enough; but will he be able to provide for the payment of three inoculations on each side of his body every third day, for some six months, say, for at least sixty operations? Will patients in private practice ever be brought to the belief that the remedy in this case is *not* worse than the disease?

Let us, however, be just. We have, as yet, found no specific cure for syphilis—it may be doubted whether we have any cure at all. There are authorities who never give mercury for it; and there are authorities who regard constitutional syphilis as a life-companion —as a thing to be discharged by no medicinal agent from its fixed seat in the body. There are authorities who let nature treat the disease. In fact, we have not yet cleared away our own ignorance and wrong-doing in this matter, as in so many others. We ought, therefore, to be very careful in rebuking Dr. Boeck because he has a strong conviction; and in justice are bound to weigh the value of his 300 cases. Let his position be eventually proved correct (and sooner or later its strength or weakness will be made apparent); then, indeed, we shall be driven to say that here, at all events, is a real remedy for syphilis. And then we shall have to see if such a practice is viable—whether the people will put up with it—whether they will consent to carry some 200 or 300 scars on their body as *remanets* of cure. In the meantime, we must await accumulation of facts. But whence are they to come? There is the rub! Who will venture to undertake such long, lingering experiments, on which certain dangers *must* be ever in attendance?

Our readers may, perhaps, be curious to know Dr. Boeck's actual method of procedure. Here it is, as given by himself: "I take the virus from a chancre contracted in coitus, or from a pustule or artificial ulceration on the person of those who are under treatment. I make the first inoculations on the sides—three on each side; and in three days time three fresh inoculations, taking the matter from the pustules produced by the first set. I thus continue inoculating on the sides every three days, until the result is negative. Then I commence on both arms, and I continue, as before, until the matter ceases to produce effects. At this stage, I take matter from *another* individual and apply it to the sides or the arms, or to both sides and arms, of my patient, and I carry on with the new matter as with the first, until it acts no more." The doctor then attacks the thighs, and works upon them until they also cease to show any further signs of venereal susceptibility. But he is not even yet contented—*scriptus et in tergo, necdum finitus*. There is one more combination of the triads to complete the victory, and to announce it—the victory of syphilis over syphilis. Three inoculations are now applied every three days, on the aforesaid three parts, at the same time, with matter taken from other—say three other—patients, "until," as the conscientious operator puts it, "every kind of matter at my disposal ceases to have any effect."

Those who may wish to pursue this strange episode in medicine further, will find the information they desire in a pamphlet just published by Dr. Boeck, *De la Syphilisation: état actuel et statistique.*"

THE WEEK.

The illogical Vegetarians have had a sort of culinary pharmacopœia published for their benefit, entitled *The Principles and Practice of Vegetarian Cookery*. We call them illogical, inasmuch as human beings possess carnivorous—canine—teeth, whose purport is evident enough. Even vegetarians, however, are not exempt from the force of facts, for we see, that amongst the articles of their diet, eggs, butter, and so on, figure. In fact, it would appear that the quantity of animal food recommended by the modern vegetarian actually exceeds the amount usually consumed by omnivorous humanity. Vegetarians have, in truth, degenerated from their original stock; the modern sectarian being merely a disbeliever in the necessity of flesh. That men may live to a good old age with "their food the fruits, their drink the crystal well," is true beyond a doubt. We lately read of a colony of monks near Naples, whose diet was solely of this poetical nature; these contemplative souls, it appeared—most of them, at least—retained their earthly tenements for a term far exceeding that of ordinary flesh-eating men of business —80, 90, and 100 or so, being their term of mortal existence. But we cannot deduce conclusions from exceptional cases; and, besides, vegetarians must remember that the earth must be peopled, that underground railways must be burrowed out, steel-clad *Warriors* launched, and doctors travel many a mile between sunrise and sunset.

A grand banquet has been given to M. Ricord at the Hôtel du Louvre, on the occasion of his retiring from the now famed Hôpital du Midi, by his old pupils and friends. We note that no one of the surgical celebrities of Paris assisted on the occasion. There was evidently some jealousy at work behind scenes. M. Ricord belongs to the class of professors whose instruction is, as it is called, *voluntary*. It is difficult, however, to understand why all the professors of *official* instruction (with the exception of M. Trousseau) should have been absent on the occasion. M. Ricord threw himself wholly on his friends' kindness for his success, and curiously enough quoted our Dryden in returning thanks:—

> "Man like the generous wine (vine) supported lives,
> The strenght (strength) he gains is frons (from) th' embrace
> he gives."

We need hardly say that M. Ricord is not answerable for the confusion of language of his reporter.

The *Gazette des Hôpitaux* tells its readers how we in England treat severe menorrhagia. M. Trousseau failing with his usual remedy, ergot of rye, to arrest a case of menorrhagia, in a given case "had recourse to a remedy highly reputed in England and Germany."

This remedy is digitalis given in poisonous doses. In the case referred to, when the prodromata of poisoning—vomitings, etc.—were excited by the digitalis, the menorrhagia ceased; "and although in this case the digitalis did not produce any serious toxic effect, the pupils remained for a long time enormously dilated." M. Trousseau also signalised another remarkable English therapeutic invention. "In puerperal menorrhagia, some English accoucheurs use large doses of alcohol. A glass of brandy or rum is administered every half hour; and when the patient wakes up next day from her alcoholic stupor, her menorrhagia is arrested, and there only remains a little headache to trouble her." The reporter of the case thinks it impossible to offer any explanation of so strange a fact! It is, however, satisfactory to find that our French brethren are at length beginning to open their eyes to the necessity of giving their patients food and stimulants whilst passing through the crises of fevers, etc., of the adynamic sort. The *eau gommeuse* and *diète absolue* and leeches of the Broussaic æra are gradually shading away; yet we do not hear French physicians say, that diseases have changed their type!

The subject of the treatment of incurable diseases afflicting the poorer classes of our countrymen has been taken up in a most wise, humane, and, as we think, very practical way, by the Workhouse Visiting Society. The plan suggested by the Society, through the voice of its Honorary Secretary, Louisa Twining, has, we are told, already been adopted with complete success by one large and important union. This is the plan:

> "Let all persons in the workhouse suffering from acute and distressing disease, such as dropsy, consumption, cancer, etc., be placed by themselves in wards apart, to be called the wards for male and female sick and incurables. In these particular wards let private charity be admitted to introduce whatever may alleviate the condition of the inmates.
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> "On the passing of such rules by any board of guardians, it would follow that the members of the Workhouse Visiting Society would raise and employ the moderate subscriptions needful to convert these wards into suitable and comfortable hospitals for incurables. Under the sanction, and with the cooperation of the surgeon, and in concert with the other officials, they would provide good beds for the bedridden, easy chairs both for those who cannot lie down and for those who ought for some hours each day to leave their beds, the salaries of trained nurses if required, and such other trifles as lemonade, extra tea, books, etc., as may seem desirable."

We believe that our profession will readily concur in the promotion of so reasonable and Christian-like a project. None so well as they can know the greatness and extent of the sufferings it is hereby sought to alleviate. Cancer, consumption, and, in short, all special hospitals, whose special object is the treatment of incurable diseases, can never cope with the misery they propose to alleviate. They are, in fact, when we compare the minimum amount of good which they are capable of doing with the immense sum of ill which they cannot touch, little more than mockeries, deluding the public into the idea that it is doing much, when in fact it is doing little more than skimming the surface of the evil. Besides, as we well know, the worst of all cases—the hopeless cases of consumption—are not admitted even into consumption hospitals. It is manifestly the proper office of the commonwealth to provide for the sufferers from these Divine afflictions, because private benevolence cannot effectually reach them. And it is equally clear, that the very principles upon which the Poor-law system is founded are opposed to the exhibition of that kindly charity and benevolence, to which no class of persons are more justly entitled than the 40,000 of the working classes who yearly die in this country from cancer, dropsy, and consumption.

At the Hospital of St. Joseph in Lisbon, it has hitherto been the custom for the chief surgeons of the institution to receive a salary inferior to that of the physicians. A change has, however, taken place; and, by a decree dated November 9th, the Government has abolished the invidious distinction, and has raised the pay of the surgeons to that which the physicians have been in the habit of receiving. The *Gazeta Medica de Lisboa*, in noticing the fact, observes that, admitting the diverse aptitudes of men for practising the various branches of the healing art, it is difficult to understand how the priesthood of the one should be less noble than that of the other, or should be worthy of a less recompense. Our Portuguese brethren are justly exultant at this abolition of an absurd and unjust distinction; but what would they say of the hospitals in England, where, for the most part, the physicians and surgeons are so far from being unequally paid, that they get no salary at all?

THE LATE EDWARD RIGBY, M.D.

We regret to have to announce the death, at the comparative early age of 56, of Dr. Edward Rigby, who, as we need hardly inform our readers, had for many years enjoyed an extensive reputation and lucrative practice as a physician-accoucheur, and whose name has been long before the profession as an authority in midwifery.

Dr. Rigby was born at Norwich. His father, also named Edward Rigby, was a man highly distinguished by his literary and general acquirements, and enjoyed with Levret the merit of having first properly distinguished the true nature of those hæmorrhages which precede the delivery of the fœtus at term. The Dr. Edward Rigby, whose death the profession have now to deplore, studied at the University of Edinburgh; and, after receiving his diploma, resided for some considerable time in Germany—at Berlin and Heidelberg: at both of which places he availed himself of every possible opportunity for acquiring a knowledge of midwifery, the department of the profession to which he had early determined to devote his attention.

His first public appointment, which he obtained soon after settling in London, was that of Lecturer on Midwifery at St. Thomas's Hospital; and he became successively Physician to the Westminster Lying-in Hospital, Lecturer on Midwifery at St. Bartholomew's Hospital, and Examiner in Midwifery in the University of London. The latter appointment he held until within a few months of his death. Of his writings, the work most widely known is the *System of Midwifery*, published as a part of the *Library of Medicine*—a work which has been long regarded as one of the best expositions of the theory and practice of midwifery of modern times. Dr. Rigby's other works are, his translation of Naegele's essay *On the Mechanism of Labour*, his earliest literary effort; *On Dysmenorrhœa and other Uterine Affections in Connexion with Derangement of the Assimilating Functions;* a second edition of William Hunter's *Description of the Gravid Uterus;* and lastly, a work published as recently as the year 1857, *On the Constitutional Origin of Female Diseases.*

Dr. Rigby was a frequent contributor to the *Medical Times and Gazette*, in which he published a series of cases illustrative of his peculiar views on the pathology and treatment of female diseases. During the last two years of his life he was president of the Obstetrical Society of London, and did all in his power to further the welfare of that society, in whose objects he felt the deepest interest.

His public and private character stood equally high. He was scrupulously exact in all his dealings, possessed of a high sense of honour, warm, zealous and immoveable in the defence of what he conceived to be the truth. His habits were somewhat retired; he lived quietly, unostentatiously; and his devotion to his professional duties was incessant.

At the end of the summer of the year 1860, his health was observed to be failing, and he resolved to leave London for some weeks. On his return, at the end of September, it was found that he had not derived the anticipated benefit from the change. During the month of December, a change for the worse took place; but he still persevered in his professional duties, and continued to see patients at his own house until within a few days of his decease. At the autopsy, performed by Messrs. Skey and Callender, in the presence of Dr. Graily Hewitt, Dr. Priestley, and Mr. Henry Thompson, it was found that the primary disease was situated in the walls of the bladder, which were infiltrated with scirrhus. Death appeared to have taken place from acute congestive pneumonia, which, together with complete suppression of urine, set in four days previously to his decease. Cut off when in the zenith of his reputation and while enjoying the fruits of his industry, his loss will be long lamented by a large circle of professional and other friends. He died at his residence, 36, Berkeley Square, on the morning of December 27th, and his remains were interred at Kensal Green Cemetery on Wednesday last,—by a strange fatality, on the very day in which he was to have been elected President of the Obstetrical Society for another year.

DR. FARADAY'S LECTURES
AT
THE ROYAL INSTITUTION.

ON A CANDLE.

A short report of Dr. Faraday's lectures (from the pen of one who is himself a well known chemical lecturer) will, we are sure, be very acceptable to our readers. Not only is Dr. Faraday's matter always of the best, but his style and delivery are so superior as to rank him as the first lecturer, as indeed he is the first philosopher of Great Britain. It is a pleasant thing to find so great a man addressing himself year after year to the young. Suitable, however, as his subject of this year may be to them, the interest taken in it by grown up children is manifested by the large number of adults who crowd to hear the master. All who listened with admiration to the "Chemical History of a Candle", could not but hope that the lecturer's life might long be spared, and that he might long continue to lecture on his favourite science of chemistry.

The first lecture, "On a Candle: the Flame—its Sources—Structure—Mobility—Brightness", was delivered on the 27th ultimo.

After claiming his right to address the juveniles, he commenced by drawing attention to the simplest and oldest candles, viz., bits of timber from bogs. The diminutive candles were exhibited—forty or fifty to the pound—which were formerly used in coal-mines, from a belief that a *small* flame would not so easily fire an explosive mixture. Then came the turn of stearine and paraffine candles, of wax, and of other varieties. Even luxuries in candles were touched upon, not, however, for much in the way of praise. Especially were condemned the grooved candles; the Professor conveying the moral, that it is not the best-looking, but the best-acting thing, which should be admired. The perfection in a candle rested in the entireness of the "cup" which held the melted wax, etc., and which was violated by the numerous grooves.

Capillary attraction raised the fluid in the wick, thus preventing its being burnt down to the level of the candle. Experiments verified the fact. Not only was a pillar of salt saturated with moisture, although only its base was placed in a dark coloured solution, but a towel left in the washhand basin, and hanging down the side, afforded an apt illustration, by bringing the contents to the ground. That a vapour rises from the heated wick, was proved by rekindling it after it had been blown out; but that the vapour was of a different kind in different parts of the flame, was indicated. The dark nucleus containing the unburnt material; the light-giving portion, containing the unburnt carbon; and the surrounding mantle of flame, in which the carbon is in full combustion, together with the play of the air through the whole, next came to be mentioned.

The *shadow of the flame* from a candle, shown in the voltaic light, and reflected upon a white surface, was an experiment to be remembered; it was seen to consist, as it were, of tongues of fire, in which the unburnt carbon was distinctly visible in waving lines of singular aspect. These tongues of fire were further, and in conclusion, illustrated by the familiar exhibition of the snap-dragon, in which the brandy furnished the fuel, and the raisins the wicks.

The second lecture was delivered on Saturday. It consisted chiefly of an analysis of Flame. The vaporous character of the dark nucleus surrounding the wick was thus illustrated:—A burning candle was placed under the short limb of a glass syphon, so that the nucleus was just brought into it; then the white vapour was collected in a flask from the long limb, and inflamed by the application of a light. Similarly, and by an equally beautiful experiment, was the carbon of the light-giving portion exhibited, the short limb of the syphon being, of course, raised into the light-giving portion of the flame. That flame, therefore, is hollow, and that the inner portion does not burn for want of air, we knew; but never have we seen a more felicitous experiment than the rapidly executed introduction of a thin strip of paper into a candle flame, which left the centre untouched, whilst the part exposed to the light-giving portion was burnt.

But not only is air needed for the sustenance of flame, but pure air. So a candle may be extinguished, even when burning at the bottom of a bell-jar to which air has access from without, because of the admixture of foul air. The introduction of air within the flame, together with the increase of draft effected by the use of a shade, was illustrated by the Argand lamp. To have a light, however, we must have a solid diffused; and none is so suitable as carbon, because, having fulfilled this important office, it passes into the outer air in the invisible form of an oxide of carbon, or carbonic acid gas. Not that carbon is the *only* light-giving material—any solid may replace it when we desire to exhibit a principle. Thus phosphorus burnt in air or oxygen, sulphur in melted nitre, sulphide of antimony deflagrated with chlorate of potash, or iron-filings with gunpowder, may all equally serve as proofs; and so also may the pale flame of hydrogen be rendered luminous by a coil of platinum wire, by the introduction of the vapour from a candle or from camphine.

The converse of this is, of course, equally true. Remove carbon from a flame, and you remove its light. Much air blown into a strong gas flame makes it of a pale blue, and if properly admixed with gas before it is lighted, affords a flame more like that from a spirit lamp.

Lastly, flame produces a strong current of lighter air, as was shown by the ascent of a fire-balloon.

Lecture III. was delivered on the 1st instant. It may be said to have been on "Hydrogen in the Candle burning into Water." In the rising current having its origin in the candle, we observe condensable and incondensable matter. Water was the only condensable product of combustion. If a soup-ladle, filled with ice, be held over a burning candle, drops collect underneath; these may be proved to be water, as potassium inflames in them in the same way as it does in ordinary water; and nothing but water—water of the purest kind. From one pound of completely burnt oil, we obtain one pound of pure water: by whichever name the material of the candle goes, water is the result of the condensation of the condensable portion. Let there be no mistake, however; water is not contained in, but formed by, the combustion of the hydrogen of the candle. The head of a poker is equally good to prove the formation of water from the burning flame.

And then, as to this water. When at its coldest, it is ice, but it is densest when liquid. A cubic inch of water forms a cubic foot of steam, and fills the vessel as completely as does air; so then, of course, if a canister thus filled with steam be closed completely by any mechanical means, the air will crush it as the steam condenses.

The expansion of water in the formation of ice was beautifully illustrated. Small bottles, made of iron one-eighth of an inch in thickness, were filled with water, and the iron stopper screwed in. On immersing them in a freezing mixture, they burst with a loud report, scattering the freezing mixture high in the air. We need not say the bursting of pipes in the frosty weather was not forgotten.

The nature and properties of hydrogen were, lastly, the theme for discussion. Its lightness, as proved by the ascent of soap-bubbles and of collodion balloons, was the theme of universal acclamation on the part of the juveniles; whilst the Professor did not fail to impress the non-luminosity of its flame with its high heating powers as matters of the greatest import. The calorific power of the voltaic battery, based upon the decomposition of water, and illustrated by the burning of a file, brought the lecture to a close.

Special Correspondence.

UNDER this head, it is intended to give a series of letters on the aspects and progress of medicine and its collateral sciences in some of the principal British and Continental cities. The correspondence will also contain such notices of passing events in relation to the profession or its members as may be of interest. In this week's number we insert a communication, received from a member of the Association who has lately visited the Austrian metropolis, on the

HOSPITAL PRACTICE IN VIENNA.

Few only of our Associates have it in their power to leave their professional avocations at home, in order to inspect what is going on in the foreign hospitals; and it is therefore, I think, incumbent on those who have opportunities of acquainting themselves with any improvements in medical science practised abroad, to publish these in the journals.

The hospitals of Paris and Berlin are attended by so many English that we are kept *au fait* with the state of medicine in these; but notwithstanding the fame of such men as Skoda, Oppolzer, Arlt, Sigmund, Schuh, etc., the Imperial General Hospital in Vienna, containing almost three thousand beds, is but little frequented by our countrymen, and has, latterly more especially, been neglected; perhaps, therefore, extracts from the scanty notes which I took in the wards of that institution, during the last summer, may not be unacceptable to my fellow-Associates.

The surgery in Vienna is in some respects undoubtedly, I think, behind that of the other capitals of Europe. This is exemplified in the general surgical treatment of wounds, etc., and in the non-adoption of modes of operation found to be successful in this and other countries; at the same time, a careful observer will see much here that is new, and may learn much that is good.

TREATMENT OF WOUNDS, ETC. In the treatment of wounds after operations, too little attention is, I think, paid to endeavouring to obtain union by first intention, even when this is especially desirable, as in cases of resection of the elbow-joint, etc. Not even in plastic operations, of which however I shall later note some successful examples, are metallic sutures employed. These are, indeed, never used, not from any ignorance on the part of the surgeons, of the esteem in which this form of suture is held in this country; but partly, apparently, from a disbelief in the advantages of union by first intention, and partly from a want of credit in the facts stated by Dr. Simpson, and other advocates of the metallic sutures. The question of facts however will, I hope, be settled, as the experiment of using to one-half of the same wound metallic, and to the other half silk ligatures, which cannot fail, I think, to convince the most prejudiced observers of the advantage of the former, is to be made in the *clinique* of Professor Dumreicher, who, however, asserts at present his entire disbelief in any advantages possessed by metallic sutures, and his belief that no surgeon will in five years be found employing this material.

Vienna has been behind the other surgical schools in testing the efficacy of the important hæmostatic method conceived by Dr. Simpson, who is honoured abroad, as here, as the man of this age who has made the most important discoveries in medical science. Shortly, however, Professor Patruban, to whom I have sent a set of acupressure needles, will be able to add his experience for or against the supplanting of the ligature as a means of obtaining occlusion of the arteries.

Irritating applications to ulcers and wounds are either much more often required in Vienna than here, or they are used where English surgeons would not find them indicated; still the advantages of cold-water dressing and general cleanliness in the treatment of wounds seem to be appreciated. Wounds in the surgical wards are always cleaned by a stream of water thrown on to them with a pewter syringe—an instrument which is not yet supplanted in any of its applications by the more convenient forms of apparatus of caoutchouc, etc., in general use in this country. Charpie takes the place of our lint, being, however, much more freely applied; indeed, generally there is far too much covering up, plastering, and employment of medicated dressings, in the management of wounds. The treatment of sores of a specific character I shall allude to, when describing Dr. Sigmund's views of the nature and treatment of venereal diseases.

Operations. Many operations which have taken their stand in this country, as acknowledged modes of treatment, are but little practised in Vienna. As far as I could learn, resection of the knee is not performed there. Such an operation was announced to be performed by Professor Dumreicher; but the operation which I witnessed consisted only in removing, in the case of a young man, who, as the result of old and arrested disease, had contraction of the knee, a wedge-shaped portion from the inner condyle and front of the femur. This was done by a crescentic incision through the soft parts, as in the operation for resection of the joint. The limb was then forcibly straightened as far as possible, and thus fixed. In consequence of continual venous oozing from the wound, perchloride of iron and other irritating applications were employed. Ultimately, I believe, after I had left Vienna the patient died. Gangrene supervened; amputation was resorted to; but the gangrene recurring in the stump, this attempt to relieve a deformity resulted in the death of the patient. In one case of resection of the elbow, which I saw performed, the sesquichloride of iron was applied to the wound as a dressing, at a time when I could see no bleeding. I was told, however, that it was to arrest hæmorrhage. The case, I believe, ultimately did well; though naturally, after such applications to the wound, recovery took place at a much slower rate than one is accustomed to see in this country, more particularly in the clinical wards of the Edinburgh Infirmary.

Operations for the radical cure of hernia are not performed in Vienna; the results in the one or two cases where an operation has been attempted, having been unsatisfactory in so far as the rupture has returned. A perusal of a translation of the papers of Mr. Redfern Davies on this subject, which will shortly appear in the medical journals, will, no doubt, lead to a renewal of attempts to effect a cure by means of Wood's operation.

In a case of strangulated femoral hernia, operated on in Professor Dumreicher's clinique, on July 2nd, no attempt to apply the taxis was made *after* the administration of chloroform. The operation was at once proceeded to, the sac being opened; and in other respects the operation resembled that most commonly practised here. The case did well.

Teale's mode of amputation by rectangular flaps does not appear to have been adopted by any one in Vienna, nor, indeed, did it seem at all known. Although some surgeons may still question its advantages, it should, at least be put to the proof in every large clinical school.

Ophthalmic Surgery. The above are examples of what appears to be a backwardness on the part of Viennese surgeons to take up the improvements in the treatment of surgical diseases which are daily made in this country. Further, I may state that neither Critchett's operation of iriddesis, nor Streatfeild's plan of growing the tarsal cartilages for the cure of entropion, were known to the assistants of Professor Arlt in July last; a paper, however, in which the latter operation was described, appeared in one of the Vienna medical journals since that time. Bowman's treatment of obstruction in the lacrymal ducts, by the introduction of probes from the dilated canaliculus, is completely adopted by Arlt; and I can bear testimony to its efficiency in Vienna as well as in my own practice. Notwithstanding this backwardness, however, there is no department of the vast hospital in which we may not with advantage spend some time in study. The ophthalmic wards of Arlt and Jaeger afford a large field for observing diseases of the eye; and admirable operating courses are given by these surgeons and their assistants. The ophthalmoscope is extensively employed; and Jaeger, who has published the most beautiful series of plates which has yet appeared, of the pathological conditions observed with this instrument, gives several courses in the year of instruction in its application, as also does Dr. Koller, Arlt's assistant. Almost daily some ophthalmic operations are to be witnessed; and as Professor Arlt combines, with his high operating powers, the capability of clearly explaining all that is necessary, an attendance in his wards is especially beneficial. I do not know, however, that there is any special point in his practice requiring more than a passing observation. The operations for artificial pupil, iridectomy for glaucoma, etc., are performed as here. In cases adapted for it, he employs the linear incision for the extraction of cataract, and in the ordinary operation he makes occasionally the lower, occasionally the upper flap. In the treatment of affections not requiring operative interference, his almost universal employment of calomel powder applied to the interior of the eyelids, after the usual fashion, by dusting it in from a camel-hair brush, is attended with such excellent results, that I would recommend the combination of this local treatment with the constitutional remedies usually employed in treating this affection in England. In the treatment of granular conjunctivitis, Arlt employs sulphate of copper, as we do; but his plan of using it is to apply it daily until the inside of the lids assume an ash-grey colour; the discoloration extends frequently to the ocular conjunctiva, giving a strange appearance to the eye, but it is not permanent.

Before leaving the subject of ophthalmic surgery, I may mention an interesting case which came before us last summer in Arlt's *clinique*. A young Bohemian girl, aged 16, who had never suffered from any previous illness, presented herself with double cataract, which had come on independent of any injury. The opaque lens in both eyes was much shrunken, being in the right reduced to a mere shred, the capsule being left semiopaque, and marked by pigment streaks derived from old adhesions of the iris. Extraction was performed in the right eye by the linear operation, and when last I saw the patient, the case appeared to be progressing favourably. The occurrence of idiopathic cataract in a young, otherwise healthy subject, at the age of this patient when her eyes became affected, is so rare, that even this meagre record may be valuable to such of your readers as are interested in ophthalmic surgery.

Fracture. Passing now to the general surgical *cliniques*, I may note first in reference to the treatment of fractures, the use, by Professor Dumreicher, in fracture of the leg, of what he calls his "Railway apparatus," which is a peculiar form of cradle for swinging the limb after it is bound up. Laid on the bed is a frame of wood supporting an inclined plane of the same material, which has two little brass rails running lengthways upon it, the angle of inclination admitting of variation; upon this is placed a cradle, which has wheels adapted to the rails, and which has a constant tendency therefore to run downwards, of greater or less intensity according to the angle of inclination of the plane, so that, however much the patient may shift his position up and down the bed, the limb is kept extended. The apparatus appeared to be very successful in giving comfort to the patient and in turning out good limbs. Another form of apparatus, new to me, was the splint I saw employed in a case of fractured humerus; it consisted of a splint of iron framework, terminated at each end by a small crutch, and interrupted in the middle, where a screw united the two portions. One crutch was applied in the axilla, the other in the hollow of the elbow, over the forearm, bent at a right angle and supported in a sling; straps and buckles attached to the crutches and to the shaft of the splint retained it in its place; by means of the screw the length of the splint may be increased, and, the forearm being fixed by the sling so as to form a point of resistance, lengthening of the splint causes extension of the arm. Although the principle of this instrument differs from those on which we should usually treat fractures, using splints for simple retention of the properly adjusted fragments, and not for active extension, yet I imagine that there are cases where it might be useful for the surgeon to bear this splint in mind, and employ it, or some modification adapted to the special circumstances of his patient.

Phosphorus Necrosis. An affection of the bones of which we, happily, see but little in this country, comes daily before the notice of those attending the surgical wards of the Viennese hospitals; it is the peculiar form of necrosis developed in the upper and lower maxillæ by exposure to the fumes of phosphorous acid. This disease is now even in Germany much less common than formerly, owing to the employment in the manufacture of lucifer matches of the red allotropic form of phosphorus, which does not undergo slow combustion in the air. Indeed, almost all the examples of these unfortunate sufferers who now present themselves are from some few manufactories where, from a false economy, the ordinary form of phosphorus is still made use of. The treatment of this affection is removal of the diseased bone; and, from the cases that I saw in Vienna, I conclude that there surgeons consider extirpation of the whole bone necessary.

Resection of the Inferior Maxilla. To Dr. Von Pitha, surgeon to the Military Hospital in Vienna, is due, I believe, the credit of the operation performed in the following case for the extirpation of the lower jaw.

A young woman, aged about 20, worker in a lucifer match manufactory, and for some time labouring under necrosis of the lower jaw, was on the 21st of June operated upon by Dr. Weinlechner, assistant to Professor Schuh. The patient, sitting upright in a chair, was narcotised by chloroform administered from a conical roll of paper. No incision was made through the skin, the soft parts being dissected from the anterior part of the lower jaw by means of scalpels adapted to the purpose, introduced through the mouth. A broad copper spatula was passed down between the lower lip and the jaw, and then, being *turned up behind* the bone, was again brought out at the mouth, so as to isolate the front part of the bone from all soft parts. A chain-saw was then passed round the symphysis, and the maxilla there divided. By means of the finger and a rounded blunt-edged instrument suited to the purpose, the periosteum was separated from the left half of the bone; the attachments of the muscles, the ligaments of the temporo-maxillary articulation, etc., being cut through by a long-bladed knife, which was, however, sharp only near the point, as is the ordinary herniotome. The left side of the jaw being thus entirely removed, the right half was treated in the same way; the mouth was syringed out, as far as I could see; neither ligatures nor sutures were applied; and the patient was removed to the ward.

On examination, the bone presented about two inches of the body completely necrosed; the whole bone was quite denuded of periosteum except in the immediate neighbourhood of the muscles, etc. The patient progressed very favourably; and already, on the 4th of July, fourteen days after the operation, the deformity of the face was very slight, and the patient could take soft food well, although she was still unable to articulate. The peculiarities of this operation are subperiosteal mode of removal, and the avoidance of any external incision; and in many cases, even in some of removal of the jaw for a tumour, this mode of procedure might, I believe, be advantageously resorted to. Before leaving the subject of necrosis, I would mention the form of *scalpel* used by Professor Dumreicher, as apparently very good, although I have not yet tested its practical utility. It has a short, well rounded handle, which may be conveniently held in the palm; the blade is but very slightly grooved from side to side, and the edge is cut off obliquely; the instruments are of various sizes, and of each size there are a pair having opposite angles of the blade cut off, so as to be adapted to all circumstances. I have already mentioned that resection of the knee is not adopted in disease of that joint, and among the numerous bad stumps that might be seen in the wards last summer, was one left after amputation of the arm for strumous disease of the elbow.

Stricture of the Urethra. A mode of treatment which I saw Professor Dumreicher adopt in a case of stricture of the urethra, may be occasionally found worthy of imitation. It was a modification of the old plan of introducing a cat-gut bougie, and allowing it to distend the stricture by its gradual enlargement under the influence of the heat and moisture of the urethra. Instead, however, of one large bougie being employed, a number of pieces of fine catgut are taken, each about a foot long, and headed at one end with sealing wax. The other end the Professor bit slightly, so as to flatten and soften the tip before introducing it; he then passed one of these carefully through the stricture, then another, and so on until six had been passed into the urethra; these were removed at the end of half an hour, when it was evident, by the size of the different portions, that two had passed through the stricture, two into it, but not through it, while the other two had only reached the stricture, and had curled up in the interior part of the urethra. The bougies being withdrawn, an attempt was made to introduce a silver catheter, but without success. This treatment was repeated frequently, at the end of one week, but little progress had been made, and it had been ascertained that a stone was in the bladder; in the following week, however, considerable improvement had taken place, and soon afterwards a full-sized catheter could be introduced. This treatment seems more commendable and less hazardous than the forced catheterism, where a blunt instrument is forced on, tearing its way through the stricture; this practice I saw adopted in the syphilitic wards, and with a successful result. Neither the external nor internal division of stricture, by cutting instruments, is in much favour in Vienna.

Operations for Malignant Disease. An interesting point of difference between the practice of the Viennese and British surgeons, is found in the treatment of malignant growths; and here I believe that the practice of the Viennese is in accordance with that of most German surgeons. In the first place, there is much more readiness abroad than here, to operate in cases of cancer; and, secondly, no attention is paid to a point on which British surgeons lay considerable stress, viz., the removal of the whole diseased organ, a point which induced the conception by Syme of the bold and hazardous operation for removal of the entire tongue; which he has twice performed, although unfortunately with an ultimate fatal result. In malignant disease of the breast, the tumour alone is removed; the whole gland is extirpated only where there is retraction of the nipple with much adhesion of the skin, or adhesion of the tumour to the wall of the chest; the latter of which conditions would, in the opinion of many of our surgeons, contraindicate any operation.

As illustrating the boldness with which some Viennese surgeons will undertake operations, which we might consider unjustifiable, I may mention that Professor Schuh in July last, in the case of a child eight years of age, suffering from malignant disease of the scapula, resected the whole of that bone. His first intention was to remove only a portion; but in the course of the operation, finding that the whole bone was involved in the disease, entire extirpation was practised. I saw the child only before the operation, and understood that after going on well for some time, she died; but Professor Schuh has, I believe, published the case in the *Mediz. Zeitung*, and states that the child was well enough to leave the hospital in three weeks.

Another example of the questionable boldness of the same operator is found in the following case, where, however, the operation proved fatal. An Austrian, aged 60, presented himself at the hospital with a tumour on the left side of the front of the thorax; it was firmly attached to the ribs, the skin being quite movable over it; it measured at its base about fourteen inches in circumference; it felt smooth, hard, and lobulated, and otherwise like enchondroma. On June 25th, 1860, Professor Schuh operated for the removal of this growth. The patient being placed upright in a chair, an incision was made across the tumour, which was laid bare, and the greater part cut away at once, the remainder attached to the ribs, etc., was removed by scissors and knife. At first, as I looked on from a little distance, I could see the movement of the pleura between the ribs, with respiration; but in the last stage of the operation, the respiratory movements of the left side of the chest seemed to cease; the patient appeared very faint, and the Professor having applied a stethoscope, for which he hurriedly called, closed the wound, keeping his finger pressed on a particular spot, carefully replacing the skin over this point, and then applying a compress. The tumour, examined after removal, presented a smooth, lobulated, hard portion externally; internally it was soft and friable. 26th. The patient very ill; pleurisy, etc. 28th. Fourth day from operation, the patient died.

T. J. W.

Progress of Medical Science.

LUMBAR ABSCESS COMMUNICATING WITH THE PLEURA: EXTENSIVE PERICARDITIS, UNDETECTED DURING LIFE.

At the meeting of the New York Pathological Society on November 14th, Dr. Alonzo **Clark** exhibited the heart of a man who had been one of his patients. It was large, had been the seat of extensive pericarditis, and was completely plastered over with lymph. About eight ounces of serous fluid had been found in the pericardial cavity.

The patient, whose case was regarded as one of rheumatism, was admitted into Bellevue Hospital in September, with pain in the back and right side. In a few days, he presented symptoms of fæcal accumulation, and measures for relief were taken accordingly. On October 1st, these symptoms, and those of rheumatism, had subsided in great measure; but he still complained of pain in the back, and in five or six days a swelling appeared in the right lumbar region, thought to be dependent upon an abscess. The treatment adopted was that calculated to bring it to a point externally. On the night of the 7th, the pain became more severe, and dyspnœa supervened. Next day, the chest was found to be half full of fluid, and the tumour in the loin had entirely disappeared. It was inferred that the pus from the abscess (which had been, probably, one of the muscular tissue) had made its way through the intercostal spaces into the pleural cavity. The constitutional symptoms became threatening, the dyspnœa very great, and the countenance dusky; the pulse ran up to 164, became small and weak, and life was evidently threatened. It was thought best to be ready to make an opening upon the reappearance of the tumour.

The patient suffered less next day, the physical symptoms remaining the same; the next day, again still less. He went on improving day by day, the pulse falling and becoming natural, until, in about fourteen days, the tumour reappeared in the loins. Two days afterwards, Dr. Stephen Smith punctured the tumour, and allowed about three gills of pus to escape. It was closed with adhesive straps, the intention being to draw off more the next day. No subsidence of the fluid in the pleural cavity was recognised. A considerable quantity of pus escaped spontaneously during the night; and next day the subsidence of fluid in the chest was very appreciable.

The patient remained comfortable for four or five days, when he was found in a state of collapse, with a great deal of pain in the right side. Upon placing the ear on the left side of the chest, deep, metallic, hollow respiration was very marked. For the moment, perforation in the left side was suspected; but, on further examination, it was found to exist on the side which had been diseased all along, and that the sound heard on the left side was transmitted. Death occurred in a few hours.

Upon *post mortem* examination, a purulent accumulation was found in the right pleural cavity. On opening the abscess, four or five sinuses were found running in different directions; and one of these was found by probing to lead upward into the pleural cavity. The pus had burrowed through the tenth intercostal space, and underneath the attachment of the diaphragm.

Dr. Clark remarked upon the singularity of an abscess on the loin opening and discharging into the pleural cavity, and then reappearing. The pericarditis, he said, had not been recognised (although some new lesion had evidently supervened some hours before death), because the ear over the cardiac region had been occupied by the respiratory sound described. No further exploration had been resorted to, because sufficient explanation for the bad symptoms had been already made out. In his opinion, pericarditis was frequently overlooked when formidable disease beside had been already recognised, which was sufficient to account for all the untoward symptoms. (*Philadelphia Med. and Surg. Reporter*, Nov. 24, 1860.)

AMMONIÆMIA.

Professor Jaksch has designated a newly-described affection, *Ammoniæmia*. The affection is an alteration of the blood produced by the absorption of decomposed urine, which has occurred in cases of paralysis of the bladder; of impermeability of the ureters; and of divers affections of the kidneys. In these cases the urine when drawn off or evacuated is ammoniacal. The Professor differentiates the disease from uræmia. There is no accompanying dropsy; there is a remarkable dryness of the mucous membrane of mouth and throat; there may be a distinct ammoniacal odour exhaled. The patient has an utter disgust for food; and sometimes violent rigors. In its chronic form it causes wasting, and clayey skin. In fatal cases coma supervenes some hours, or even days, before death. Sometimes the disease follows an acute course, terminating rapidly either in recovery or death. Occasionally the patient, concealing his urinary affection, is thought to be suffering from typhoid fever.

EFFECT OF CHLOROFORM ON THE CEREBRAL CIRCULATION.

A CASE of extensive compound fracture of the right side of the frontal bone, in a boy aged 10, with laceration and destruction of a portion of the cerebral substance, and much hæmorrhage, afforded Dr. Bedford BROWN an opportunity of observing the effects produced by chloroform on the cerebral vessels. The sensibility of the patient being very great, it was determined to administer chloroform previously to the removal of the depressed bones, which were deeply driven into the brain, and required fifty minutes for their removal, during which the anæsthetic was repeated from time to time.

The hæmorrhage, which had previously been free, ceased almost entirely after full anæsthesia had been produced. Whenever the anæsthetic influence began to subside, the exposed surface of the brain presented a florid and injected appearance: the hæmorrhage increased, and the force of the pulsations became much greater. At these times, so great was the alternate heaving and bulging of the brain, that Dr. Brown and his colleague were obliged to suspend operations, until the vascular action had been quieted by a repetition of the chloroform. Then the pulsations would diminish, the cerebral surface would recede within the opening, as if by collapse; the organ becoming pale and shrunken, and the hæmorrhage ceasing. The changes recurred sufficiently often during the operation, in connexion with the anæsthetic treatment, to show that there could be no mistake as to the cause and effect; as consciousness diminished, in a corresponding ratio there was diminution of vascularity; and as the mental power returned, the contrary would occur.

The patient suffered no mischief from the anæsthetic. Some symptoms of inflammatory fever set in, but were soon subdued; and the case would probably have soon done well, had not a fungus cerebri appeared on the eighth day. This was successfully treated in about a month; and, at the end of more than eight months, the boy was in good health. (*Amer. Journ. of Med. Sciences*, October 1860.)

FUNGUS CEREBRI SUCCESSFULLY TREATED BY PRESSURE.

IN the case of fractured skull, referred to in the preceding quotation, Dr. B. BROWN made a successful application of pressure to the cerebral fungus which appeared, and which projected nearly an inch from the skull. In general, the treatment of this complication is considered very unsatisfactory. Ordinary mechanical pressure is liable to produce symptoms of compression and coma; and removal by the knife is the means generally recommended.

The plan adopted by Dr. Brown consisted in the use of what he terms a self-regulating graduated compress, consisting of a common sponge, of close and soft texture, and more than sufficiently large to cover the entire wound. A piece of soft linen was laid over the surface of the fungus, to prevent the rapidly forming granulations from making their way into the interstices of the sponge. The sponge, having been previously reduced by firm compression to the smallest possible compass, was applied over the linen, and secured with moderate firmness by a few turns of a broad roller round the head. The application of this compress created no injurious or unpleasant consequences whatever. Dr. Brown supposed that the constantly exuding secretions from the wound and fungus would be gradually absorbed by the sponge, so that the elastic compress would be made to expand regularly and progressively, exerting a decided yet equable and gradual pressure, which ultimately would reduce the morbid mass to its proper limits within the skull. At the end of a few days, when the dressings were removed, it was found that the fungus had been reduced even below the edges of the surrounding bone. The edges of integument were now brought nearly together by means of adhesive straps, and the sponge-compress and bandage were reapplied as before. The dressings were renewed every few days, and each time a progressive diminution in the dimensions of the wound was observable: in three or four weeks the wound closed perfectly by union of the edges of the integument in a well-formed cicatrix. (*Ibid.*)

TREATMENT OF SPINA BIFIDA BY INJECTION OF IODINE.

THE *North American Medico-Chirurgical Review* for November 1860, contains the reports of two cases of spina bifida, under the care of Professor GROSS. Both children were males, and were otherwise healthy and had the full use of their limbs. One was aged eleven weeks, and had a tumour of the size of a large orange: the other was three months old, with a tumour as large as a medium-sized billiard ball. In each case the tumour was translucent, fluctuating, and elastic: in one it was much attenuated, and discoloured by capillary injection; in the other it was not coloured, but thin and shining, and less attenuated. In neither case was any fluctuation felt at the fontanels, when the size of the swelling was diminished by pressure. Dr. Gross in each instance made a puncture, about an inch and a quarter from the base of the tumour, by means of a flat curved needle: and, the instrument having been carried subcutaneously into the tumour, a drachm of its contents was allowed to escape. A solution of one-eighth of a grain of iodine and a quarter of a grain of iodide of potassium was then injected by a small syringe. The puncture was closed by the twisted suture, and the whole tumour was coated with collodion. After the operation, three drops of laudanum were given; and the child was directed to be kept lying on the face.

In one of the cases—that of the child aged eleven weeks—frequent leakage of fluid took place from the tumour, which burst suddenly on the fifth day after the operation. The child died in severe convulsions. The lining membrane of the sac was found to be highly injected, and coated with a thin layer of lymph, which in some places was softened and broken down. The opening into the spinal canal was a cleft about a quarter of an inch wide, involving the arch of the fifth lumbar vertebra. No nerve-twigs could be traced into the tumour.

In the other case, the operation, which was first performed on October 19th, was repeated on October 26th and November 2nd, and then every fourth or fifth day until December 23rd: the iodine being increased to one-sixth of a grain. Convulsions rarely occurred after the operations: the child, however, died in convulsions on December 23rd, the tumour having burst and discharged its contents. The cavity of the sac was found to be about one-third obliterated by coagulated lymph; and the fissure, which involved the posterior part of the last lumbar vertebra and the first piece of the sacrum, was narrowed by a deposit of the same material on the arachnoid at its sides.

The treatment of spina bifida by iodine injection, first proposed, we believe, by Velpeau, was brought before the notice of the profession in America, in 1859, by Dr. Brainard of Chicago. He gave the result of ten cases, treated by himself, and by Crawford, Chassaignac, Velpeau, and Nélaton: Dr. Gross's cases make up the number to twelve, of which five are said to have been cured, five died, and in two the results remained uncertain. Dr. Gross, in his clinical observations on the cases, does not appear at all encouraged to repeat the attempt, but prefers compression as the safest and best mode of treatment. Of the iodine injections, he observes "that it is impossible to circumscribe the resulting inflammation sufficiently to prevent it from spreading to the spinal marrow and its membranes." Dr. Brainard, in an apparently successful case, of which the account is before us, tied a ligature round the base of the tumour to cut off the communication with the spinal canal. Still, as the sac of spina bifida is not a closed cavity, and it is difficult to make it otherwise, the operation of injecting it must always be attended with danger. The pathological appearances presented by the spinal cord in Dr. Gross's cases are not recorded,—an omission which, to some degree, takes from their interest.

INGUINAL ANEURISM CURED BY DIGITAL COMPRESSION.

IN the *New Orleans Med. and Surg. Journ.* for September, Dr. W. C. NICHOLS reports the case of an inguinal aneurism cured by digital compression. The tumour was of about the size of a goose-egg, situated in the right groin, above Poupart's ligament. Dr. Nichols, satisfied that all pulsation in the tumour could be checked by pressing the thumb on the course of the artery, felt assured that, by securing competent assistants, the flow of blood into the aneurism could be moderated a sufficient length of time to promote the fibrination of its contents, and effect a cure. Twenty-four assistants were obtained, and the treatment was begun by thrusting the thumb directly against the neck of the sac, so that all pulsation was speedily arrested. Morphine in full doses was given to the patient to benumb sensibility; and pressure was continued by an alternation of assistants. After making pressure for thirty hours, all pulsation ceased; within forty hours the cure was announced as successful; and within fifty-four hours, the watch over the patient was withheld. The aneurismal tumour had contracted to a firm nucleus, about the size of a walnut. Six months later, though the patient had undergone great muscular exertion, the cure remained complete. (*Amer. Med. Monthly*, Nov. 1860.)

OXALATE OF CERIUM IN GASTRIC AFFECTIONS.

DR. CHARLES LEE has tested the efficacy of oxalate of cerium, recommended by Professor Simpson of Edinburgh, as a remedy in gastric affections.

Dr. Lee first used the medicine in cases of obstinate vomiting in advanced pregnancy, which had resisted all the ordinary remedies, such as creasote, hydrocyanic acid, ice, bismuth, etc. In each of four cases of the kind, which he relates, he gave one or two grains of the oxalate of cerium every two or three hours with marked success; the vomiting being completely arrested. He has also found the effects of the remedy no less encouraging in the vomiting that often accompanies phthisis, in pyrosis, in hysterical emesis, and in various dyspeptic conditions, especially in atonic dyspepsia. In fourteen cases of the latter disorder, the effect was perceptible in a short time, both in relieving nausea, and in restoring the appetite. Dr. Lee confirms Dr. Simpson's statements as to the rapidity of action of the oxalate of cerium; but is disposed to question its action as a *sedative tonic*, as he has tried it without success in several cases of acute and subacute gastritis, both idiopathic and supervening on debauch, or delirium tremens. (*Amer. Journ. of Med. Science*, October 1860.)

TREATMENT OF DYSPEPSIA.

PROFESSOR PEPPER, of Philadelphia, is in the habit of using the following mixture with benefit in dyspepsia:—Creasote, eight drops; carbonate of soda, ʒij; tincture of ginger, ʒj; tincture of cardamoms, ℥j; sugar, ʒij; cinnamon water, ℥vj. The dose is a tablespoonful three or four times a day. (*Med. and Surg. Rep.*, Nov. 24th.)

AROMATIC SULPHURIC ACID IN THE TREATMENT OF TAPEWORM.

DR. B. DARRACH (*Amer. Journ. of Med. Science*, October 1860) brings under notice an addition to the numerous remedies for tænia, viz., aromatic sulphuric acid. He obtained his knowledge of the remedy from Dr. Nichols, who informed him that he had under his care, early in February 1860, a farmer, aged 35, who had tapeworm, and presented the appearance of a phthisical person. An ounce of aromatic sulphuric acid was mixed with a pint and a half of water, and the patient was desired to drink of this as often as he could until he had used it all. Previously to his taking this medicine, portions of the tænia had been thrown off; but on the third day of using the mixture, he passed about a pint of the worm in fragments, apparently partly digested. At the time of reporting (August 1860) the patient had entirely regained his flesh and strength, and had perceived no signs of a return of the parasite.

The aromatic sulphuric acid, as a remedy for tænia, was first brought under Dr. Nichols's notice thirty years ago, by a woman who treated herself with it with success. Since that time, Dr. Nichols has used it in several instances, always, he says, with the effect of expelling the worm in a fragmentary and semi-digested state. Most of the cases have remained under observation for several years, without any return of the parasite.

FUMIGATION OF THE LUNGS AND AIR-PASSAGES.

MR. CHARLES MATTHEWS describes, in the *American Medical Times* for November 24th, 1860, an apparatus which he names the "Multiform Fumigator." A slender tube of thin paper is formed of suitable length; and in one end is fixed a short stiff tube of the same material, to serve as a handle and mouthpiece. Another tube is constructed of delicate tissue paper, closed at the bottom, to hold the powder, and fitting into the first tube in such a way, that there will remain just space enough between the two for the passage of the smoke. The inner tube being then filled with the powder, and twisted to a point, the compound tube is ready to be lighted and smoked in the manner of a cigar. For the convenience of a patient sitting up in bed, a light sliding pan, spoon-like in form, is attached to the tube, to catch and hold the ashes. The proper construction and filling of the tube is a matter of much nicety. For filling the tube, the first desideratum is a proper combustible powder, inert, or nearly so, by burning which the medicinal agents mixed with it are sublimed, or made volatile. Many vegetable substances answer this purpose very well, as decayed wood, pine-bark, etc.; but the powder of cubebs is, on the whole, preferable where a gentle stimulus is admissible. The tube, when filled and lighted, will burn slowly for a long time, and the vapours and fumes can, with a little practice, be cautiously inhaled without inconvenience or irritation, when the larynx, trachea, or lungs themselves are the seat of disease; expelled through the nostrils, in the treatment of their many troublesome and obstinate ailments; retained in the mouth for toothache, neuralgia, etc.; or, finally, for deafness, or other complaints of the inner ear, forced into the Eustachian tube.

A NEW DETERGENT.

DR. DÉMEAUX strongly recommends the following soap as an excellent remedy in certain diseases of the skin, as a detergent and disinfectant. It is, he says, perfectly soluble in water, hot or cold. It may be used to impregnate the clothes and linen of patients whose excretions yield fetid emanations, etc. It is composed of equal parts of coaltar, soap, and alcohol; the ingredients being heated in a water bath until perfectly dissolved.

ADMINISTRATION OF COD-LIVER OIL.

M. SAUVAN proposes to make rancid cod-liver oil palatable by disinfecting it with the essence of bitter almonds, which has the property of destroying certain strong odours, such as musk. M. Jeannel points out a process for imparting to cod-liver oil a flavour as pleasant as that of oil of almonds, whereby the disgust to the medicine is removed, even with the most impressionable persons. His process consists in shaking up the oil with cherry-laurel water; he thereby acts upon the odour and savour of the oil. M. Chevrier has another method of making the oil slip over the palate *jucundè;* but he does not describe it.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At the Comitia Majora, held on Saturday, December 22nd, the following gentlemen, having undergone the necessary examination, were admitted members of the College:—

Atkins, James Ramsey, M.D., Stoke Newington
Harley, John, M.B., King's College
Palfrey, James, M.D., Wellington Street, London Bridge
Pollock, Arthur Julius, Guildford Street
Southey, Reginald, M.A., Harley Street

At the same Comitia, the following gentlemen, previously extra-Licentiates, were also admitted members under the bye-law applicable to extra-Licentiates of the College:—

Ashton, Thomas, M.D.
Watson, Henry Waldron, M.D., Derby.

APPOINTMENT.

HARPER, Henry L., Esq., elected one of the Medical Officers to the County Lunatic Asylum at Chester.

BIRTH.

Of a daughter, the wife of—

*SWAIN, Thomas, Esq., Birmingham, on December 31st, 1860.

DEATHS.

GRAVES, Hugh R., Esq., Surgeon, at Gloucester, aged 23, on Dec. 24.
HARRISON, Charles, M.B., at Gargrave, aged 25, on Dec. 30.
MAGRATH, Andrew N., Esq., late Director-General, Madras Medical Department, in London, aged 58, on Dec. 27.
RIGBY, Edward, M.D., at 36, Berkeley Square, aged 56, on Dec. 27.

SUTURES IN OVARIOTOMY. In a discussion which lately took place at the Obstetrical Society, *apropos* of the operation for removal of ovarian tumours, great stress appears to have been laid by Mr. Spencer Wells, Dr. Tyler Smith, and others, upon the necessity of passing the metallic sutures or hare-lip pins through the peritoneal edges of the wound. Mr. S. Wells, both from experiments on animals and from the results of his operations on ovarian tumours, is led to think that this is a vital point in the operation.

EPIDEMIOLOGICAL SOCIETY. On Monday, January 7, 1861, a paper will be read by Dr. Milroy, "On the Influence of Contagion, on the Rise and Spread of Epidemic Diseases."

THE LOW TEMPERATURE. The greatest degree of cold probably ever noted (philosophically) in this country, was registered on Christmas-eve. The thermometer in several places was found to indicate 13° *below zero.*

QUACKERY AND SCIENCE. When the Countess Del Cinchon, in her enthusiastic gratitude, sent to Rome and to Madrid the miraculous powder which had cured her fever, she committed an act of empiricism; but received and experimented with by Torti and Sydenham, the Peruvian Bark became a medicine administered according to rule, according to method, which could only be determined by physicians. (*Trousseau*).

PATHOLOGICAL SOCIETY OF LONDON. The fifteenth annual meeting of this Society was held on the evening of Tuesday last, January 1st. The report of the Council stated that the number of members was steadily increasing. Twenty-eight had joined during the past session, of whom six only were non-resident, making altogether 366, a total exceeding that of any previous period. The condition of the Society's finances was equally flourishing. The total receipts for the past year amounted to £380 : 2 : 2; of which £22 : 1 : 7 have been realised by the sale of *Transactions*, and £2 : 1 : 7 by dividend on funded property; leaving as the amount of subscriptions the sum of £355 : 19 : 0; of this £27 : 6 : 0 have been received as life-subscriptions, and as fees from non-resident members, which sum, at least, would be added to the Society's funded property. The total expenditure for the year amounted to £319 : 12 : 4, leaving in the treasurer's hands a balance of £126 : 13 : 2. During the past session there had been a full supply of interesting specimens for exhibition at the Society. Fresh exhibitors among the more recent members had appeared at the meetings, and in this manner a different order of specimens, and frequently differing views, had, from time to time, been brought under discussion, with advantage to the members at large. Owing to the abundance of interesting pathological topics presented for consideration, long dissertations and reports had been as much as possible avoided. A laborious scrutiny, when necessary, had been applied by practised pathologists to those specimens which required further investigation; but the results of such labour had been prepared in as concise a form as possible. The Council expressed its cordial approbation of the manner in which Dr. Ogle, who now retired, after a service of four years, from the post of Honorary Medical Secretary, had fulfilled the various duties which had devolved upon him. The following gentlemen were then elected the Officers and Council of the Society for the year 1861:—*President:* H. Bence Jones, M.D., F.R.S. *Vice-Presidents:* G. H. Barlow, M.D.; Sir John Liddell, M.D., C.B.; T. Watson, M.D., F.R.S.; C. J. B. Williams, M.D., F.R.S.; John Birkett, Esq.; James Dixon, Esq.; William Fergusson, Esq.; Alexander Shaw, Esq. *Treasurer:* Rd. Quain, M.D. *Council:* A. W. Barclay, M.D; Thos. A. Barker, M.D.; W. D. Chowne, M.D.; W. O. Markham, M.D; Charles Murchison, M.D., J. W. Ogle, M.D.; T. B. Peacock, M.D.; H. Hyde Salter, M.D.; E. C. Seaton, M.D.; R. H. Semple, M.D.; Thomas Ballard, Esq.; W. White Cooper, Esq.; J. G. Forbes, Esq.; Jabez Hogg, Esq.; J. C. Langmore, Esq.; Henry Lee, Esq.; John Marshall, Esq., F.R.S.; J. J. Purnell, Esq.; John Pyle, Esq.; S. J. A. Salter, Esq. *Honorary Secretaries:* J. S. Bristow, M.D.; Henry Thompson, Esq.

ENEMATISM CORAM PUBLICO.—The natives are very liable to constipation, consequently there were numerous and constant applications for purgative medicines to remove this unpleasant condition. Crowds of persons, of both sexes, may be seen upon the beach at early morn, with various medicated decoctions, which they blow into the bowels from a bottle-shaped gourd in order to obtain relief. This constipated state of the bowels, in my opinion, chiefly arises from the unstimulating nature of their diet. This practice has the bad tendency of relaxing the lower bowel, and I have no doubt that its constant repetition weakens the muscles brought into action in the process of defecation, so that it induces and confirms the complaint it is daily used to obviate. (Mr. R. Clarke on Dis. of Gold Coast, in *Trans. Epidem. Soc.*)

STATISTICS OF MULTIPLE BIRTHS. Of 484,550 cases of accouchement collected in France, England, and Germany, we find 6248 were double births, 78 triple, and 4 quadruple; that is, 1 in 78 twins, 1 in 6209 triplets, and 1 in 121,082 quadruplets. As regards country—in Great Britain, triplets, 1 in 4311; in Germany, 1 in 7182; France, 1 in 11,105.

Treatment of Dysentery on the Gold Coast. Some of the natives use an enema of a plant called by them "Tanta Annana," and restrict the diet to the flour of Indian corn which has been highly parched or roasted. A soup is eaten with it, made by boiling an infusion of the tanta leaf, scraped roasted plantains, and small pieces of dry fish, until it thickens. Should this mode of treatment fail, they use the bark of a tree called "Etua" (*Kiglia Africana*). The bark is boiled for two hours in fresh palm wine, and when cool is drank three times daily. Boiled rice as a dry diet is also strongly recommended. To relieve tenesmus they introduce into the bowels a suppository, made either of ground grains of paradise, or of the grains of a black pepper called "susmah," which is beaten up with the leaves of the plant called "Empoompoo." They also use for this purpose an enema made by expressing the juice of the plant called "yanchie" (a plant of the phormum genus), which they mix with a small quantity of the acetate of copper; but in the first instance, and during the cure, they purge the bowels with drastic medicines, and depend much upon enemata, given in small quantity, so as to be retained in the bowels, and upon great attention to diet. They are directed to keep themselves warm, and to rub the loins and belly over with a composition of grains of paradise and other peppers. The patients are allowed by some of the country doctors to wash their bodies with warm water; but, in general, pure water is forbidden, the skin being instead assiduously laved with a cold unstrained infusion made by macerating for one or more days the decayed roots of the plantain tree, with the leaves of the lime tree, cassada plant, and roots of the water lily, but in such case the skin is subsequently anointed with shea butter. After this some light food, generally a gruel called "pampa," made of Indian corn, is taken. In treating dysentery, they strongly recommend their patients to take cold air baths. They are directed to rise at daybreak, and sit naked in the open air, exposed to the cool and pleasant morning breeze, until six o'clock a.m. They are then washed in the infusion before described, have the skin well greased with the shea unguent, and partake of some "pampa" gruel, when they retire to rest, and frequently fall into a sound and refreshing sleep, often lasting many hours. This simple method of obtaining an air bath is likewise much practised to restore the health of invalids convalescing from other lingering illnesses besides dysentery. Persons while suffering from dysentery are not restricted from the use of meat, but the mass of the people being without the means of procuring it, they use dried fish as a substitute, which seems to answer equally well in persons not accustomed to animal food. Crab and crayfish are eaten roasted, but prohibited when boiled; beef is not objected to, provided it has been cooked the previous day; and the same rule applies to venison, and the flesh of the porcupine, elephant, and buffalo; indeed, many of the natives consider buffalo meat, not only as a safe article of diet, but even view it as a valuable curative agent. Mutton and pork, in any shape or form, are prohibited, as well as the flesh of the wild and domestic fowl. A cold infusion of the bark of a tree possessing the medical virtues of Winter's bark, with the root, bark, and leaves of the boabob tree, is drank three or four times daily. The bark resembling Winter's is procured from a tree growing in the inland districts of the settlement. It is rough, and of a brown colour. Sometimes the powder of these plants is given in cold water frequently during the day, and this powder is also mixed up with a small quantity of warm water, and administered as an enema at irregular intervals. Several of their medicines are given in palm oil, on the supposition that when mixed with water they become inert. A great many other remedies are used in this disease, and I have merely given a meagre outline of the general principles applied by them to cure it. They consider dysentery highly contagious, and take care not to use the same convenience as the patient. With regard to our medicines, they highly esteem castor oil in dysentery, diarrhœa, and other abdominal disorders, and prefer it and jalap as purgatives to any other in use in Europe. It will be observed that the method of treatment adopted by the natives to cure dysentery differs widely from the European plan of treatment in one most important point, that of diet; for the natives direct that the patient's food shall be dry and nutritive, whereas the general rule of diet adopted by European medical officers is to confine the sufferer to soups and farinaceous substances, with an entire abstinence from solid animal food. This, in my opinion, is the secret of the great success attained by the natives in the cure of dysentery. (Mr. R. Clarke in *Trans. Epidem. Soc.*)

Preliminary Education of Medical Men. The following excellent remarks were lately made by Sir R. Kane on this subject:—

"Considerable difficulty has always been felt as to the preliminary or general education of medical men. In no profession, in no sphere of life, is the possession of extensive and varied information in literature and science of so much and such immediate practical importance as to the medical profession. Improvements in the healing of disease, or in the knowledge of the structure and function of our bodies, belong to no one country and to no one period. The power therefore of referring to works of various countries and of different languages is to the medical man an object of special importance. The sources and the action of medicines; the nature and the origin of those various morbific influences, on the avoiding or neutralisation of which may depend the lives of thousands—these and other equally important phenomena, which form subjects of study to the educated physician—require from him a familiar acquaintance with the scientific principles of nature in its widest sense. And it is to the honour of that noble profession that at all times and in all countries where human suffering required relief, its members have been ever found indifferent to danger, regardless of prejudice; amidst squalor and contagion, eagerly proffering the aids and counsels of enlightened experience, the sympathies and consolations of kindly benevolence. With such important, almost sacred, functions devolving upon the medical men, it will be understood how very necessary it is that not merely the special professional subjects of his education should be provided for, but that also that general scientific and literary education which is so indispensable, not merely to complete his professional studies, but to give him in society and with the state that position and influence on which so much of his public usefulness must depend, should be by no means left out of view. On these grounds it should appear that medical should include or be preceded by the fullest possible education in arts. We shall not fail, by means of our representative in the council, to represent the necessity for enforcing a larger proportion of general education, and we anticipate that, although it might be too much to require every medical man to take the degree of Bachelor of Arts before commencing his professional studies, yet it would be very desirable that the diploma of Licentiate of Arts should be required, especially as the course of education requisite for it has been made to conform in a great degree to the peculiar exigencies of the medical profession."

Tobacco-Consumption in France is on the increase. Between 1836 and 1840 the consumption was 470 *grammes* per head—a *gramme* being about 15½ grains; between 1840 and 1845, 500 *grammes*; 1845 and 1850, 525 *grammes*; 1850 and 1855, 600 *grammes*; and 1855 and 1860, 600 *grammes*.

Dr. Gendron, M. Velpeau informs his academy, died from croup contracted whilst performing tracheotomy upon a young woman.

Native Medicine on the Gold Coast. The natives who profess and practise the medical profession are either women or men. The former scarify and cup with much dexterity, letting blood from the veins of the hands and feet to relieve local pains; but venesection from the arm is not practised. Leeches, although abundant, are not used by the natives. In selecting various herbs and plants, they discover no mean power of observation; for there is scarcely a plant without its peculiar healing action being known to them. This knowledge is seldom imparted, but is transmitted from generation to generation, and is generally confined to a female member of the family. The men who practise medicine are ranked with the fetish priests. They do not profess to cure disease in general, but devote their attention to the relief of special ailments. Thus they will, when applied to, say whether they have or have not any skill in the treatment of the particular complaint, or, as they express it, "they have no good medicine for its cure." The consequence is, that there is a vast number of country doctors, each boasting of his skill in the management of his own speciality. Many of them, however, are mere empirics, and deceive their patients by their tricks. Sick persons travel or are carried great distances into the interior to put themselves under a native doctor having a reputation for curing the particular disease they may at the time suffer. The doctor's fee varies according to the rank of the patient; but it is in general a dollar, 4*s.* 6*d.* sterling, a fowl, a goat, or a piece of cotton goods or cutlery, etc. (Mr. R. Clarke in *Trans. Epidem. Soc.*)

Extraordinary Longevity. The obituary in the *Times* of the 1st inst. records, in a long list, the deaths of twelve ladies and gentlemen (seven of the former and five of the latter) whose united ages amounted to 1031 years; being an average of 85 years and eleven months each. The eldest of these was a gentleman aged 96, and the youngest, another aged 78.

Sanitary Science in America. Our go-a-head transatlantic brethren have, in several respects, certainly not been very forward in their attention to the requirements of public health. The *American Medical Times* has of late frequently called attention to the hygienic defects existing in New York; but, from a recent number of that periodical, we learn that a move has at last been made to place things in a better condition in that city. The *Quarterly Report* of the superintendent of Police of New York shews that there have been 4,562 cases subject to their supervision acted on, consisting of overflowing sinks, filthy houses, yards, cellars, areas, etc., unsafe buildings, etc., of which 841 of the nuisances were abated by the department, and 3,721 by the owners, under the orders of the department. There were 1,074 steam-boilers examined, of which number 58 were tested by hydrostatic pressure, and *seven* found to be in such condition as to require immediate repair, which, under the order of the department, was promptly attended to by the owners. The squad also inspected 197 slaughter houses, the condition of nearly all of which is reported to be unsuited, in location and construction, for the purposes to which they are applied. There were also inspected 1,861 tenement houses, which are located in but four Wards, viz., First Ward, 253; Fourth Ward, 456; Sixth Ward, 562; and Seventh Ward, 590, tenement-houses. The inspection of those in the First and Fourth Wards was made only for ascertaining the means of escape in case of fire, ventilation, general sanitary condition, and population, which in these two Wards show that of 709 of this class of houses the means of escape is bad in 269 of them, which are populated by 11,881 souls; that 232 are badly ventilated, and 210 are in bad sanitary condition. The population in the whole 709 houses amounts to 22,859, to which should be added the cellar population, in all sorts of buildings, 2,120 souls, in order that it may be seen at a glance how living human beings are packed away. The measurement of the cellars thus occupied shows an average of about 270 cubic feet of air-space for each person. The examination of the Sixth and Seventh Wards was more thorough, and presents the following results: there are in these two Wards 1,152 tenement-houses, with a population of 37,064. Of this number the means of escape are bad in 728 houses, having a population of 24,648; the ventilation is bad in 324 houses, having 12,192 population; the sanitary condition is bad in 588 houses, having the population of 20,518 souls: the cellar population in these two Wards amounts to 2,672. Exact measurements were made of the apartments of these houses, by which it appears that 2,485 persons live and breathe in apartments where the number of cubic feet of air-space is less than 200 for each individual; that, for 7,229 persons, it is between 200 and 300 cubic feet each; that, for 8,817 persons, it is between 300 and 400 feet each; that, for 6,948 persons, it is between 400 and 500 feet each; that, for 7,421 persons, it is between 500 and 700 feet each; and that, for 4,164 persons, it is between 700 and 1,000 cubic feet each. The average quantity of space each person is permitted to have, in which to live, is not much more than that required between decks on an emigrant ship, both by the laws of Great Britain and of the United States. The Brooklyn report shows that 2,030 cases have been acted on, embracing filthy houses, sinks, yards, cellars, cisterns, culverts, etc.; of which 2,021 of the nuisances were abated by owners, under the order of the department, and only nine were obliged to be abated by the department. This speaks well for owners in Brooklyn, and shows that, in general, they only require to have the proper complaint made, when they promptly apply the remedy.

Lunacy on the Gold Coast. A superficial observer might suppose, from the very few deranged or imbecile persons going about at large in the coast towns, that the inhabitants were seldom attacked by maniacal disease; but, from inquiries I have made on this subject, I am satisfied such is not the fact. Lunatics, it is true, are seldom seen in the coast towns, because their friends remove them into the bush as soon as possible after the maniacal paroxysm has been manifested; for the Fantees, Accras, and all the other races on the Gold Coast view madness with horror, and as bringing disgrace upon the afflicted party, his family, and friends. Suitable houses are therefore generally provided in the bush for the reception and medical treatment of the insane. In the neighbourhood of Accra, persons suffering from mania are sent to the town of Teshia, a few miles distant from Accra. With respect to the mode of treatment adopted by their doctors in these native asylums, the primary objects aimed at appear to be the security of the patients and the prevention of harm being done by them, either to themselves or others, during the maniacal paroxysms. With these objects in view, the patients are carefully secured by fastening the wrist to a log of wood by a staple, sufficient space being left between the log and staple to serve the purpose of a rude handcuff. If the lunatic is very violent, the ankles are similarly fastened. In this condition they lie or sit on the ground, where they are often much neglected, being allowed to become dirty and extremely loathsome. On the first appearance of the disease, the head is shaved, when pounded leaves and other cooling applications are kept on it to reduce its temperature, and to calm down mental irritation. (Mr. R. Clark in *Transactions Epidem. Society*).

Chemistry *versus* Microscope. Iron may be readily obtained from the ash of urine containing blood; and this fact has been made use of to demonstrate the existence of blood in the urine, when its presence could not be shown microscopically, in consequence of the absence of blood-globules in it. (*Naubauer*).

MIDWIFERY ON THE GOLD COAST. I was called upon to attend several women in lingering and difficult labour during the past year 1858. I generally found an aged woman acting as midwife; but the patient was also cheered by the presence of numerous male and female friends, and although I readily induced them to leave the room, they returned to console her as soon as I left the house. Parturition in the native woman has been generally represented as an easy process, and soon accomplished; but my observation is quite opposed to this opinion, for they suffer as much during child-birth as the female of civilised countries, and unfortunate cases have happened where the woman has died undelivered. Instrumental assistance is as often required; and some of the worst cases of laceration of the perineum, prolapsus uteri, and even laceration of the soft parts, to such an extent as to lay the vaginal bowel, and neck of the bladder into one common cloaca, fell under my notice in the course of my residence at the Sierra Leone and the Gold Coast. The native midwives never think of supporting the perineum. The sit in front of the woman, another female placing both her hands against the patient's sides to support them. They do not support the back, because they suppose that if they did so, the child's eyesight would be injured. In slow and lingering labours, some of the midwives give a paste made of the tender roots of the Papua tree (*Carica Papya*) and the kernel of the palm nut, fomenting the belly with decoctions of okro (*Hibiscus Esculentus*), and other muciliginous plants. They also cause her to walk about the room. In difficult labour, she generally calls to her aid another woman of the same craft; and if delivery is still unaccomplished, the assistance of the surgeon is then requested. Should the placenta be detained, the patient is directed to retain her breath, or to blow strongly into a bottle, or into her hand. Sometimes they lave the abdomen with cold water to constringe the womb and cause the placenta to separate. Occasionally, they tickle the throat to excite vomiting and the desired uterine contraction. Women dying undelivered, are buried in the sand beach; and in some of the remote parts of the country, their bodies are thrown into the bush, to become the prey of the jackal and other wild beasts. (Mr. R. Clark in *Trans. Epidem. Soc.*)

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

THE DEATH OF SIR HENRY MARSH.—A correspondent makes inquiry concerning the nature of the disease which carried off Sir H. Marsh so suddenly. It was, as we understand, a pure case of hæmorrhagic apoplexy. Sir H. Marsh first fell in a fit, and broke the fibula in the fall. Then he had a slight return of sense with giddiness and vomiting; and then relapsed into total insensibility, with stertor and spasmodic twitches of the limbs; and died about three hours after the first attack. The attack was so unexpected, that his carriage and horses (an incident which will remind every one of the death of Dr. Todd) were at the door for him to go out on his morning visits.

A. C.—Dr. H. G. Wright, of Somerset Street, states, in a note to *The Athenæum*, that his father, who was a keen sportsman and an excellent chemist. in 1820, first used fulminating mercury in copper caps; chlorate of potass having been previously used, and being found defective by reason of its oxidating qualities. In 1823, he published in *The Philosophical Magazine* an account of his process, which was eventually adopted by Government. All, however, that he got for his pains, was a snubbing letter from the Duke of Wellington, and also "an expenditure of money in stopping some attempts to pirate the discovery."

INDISCRIMINATE TESTIMONIALS.—SIR, I think the following advertisement is worthy of note in your JOURNAL, as showing the consequences which result from the indiscriminate giving away of testimonials, so frequently practised by members of our profession. It seems to me reasonable that certificates ought not to be given except for particular purposes specified in them. Testimonials of the kind here referred to, may be put to very bad purposes.

Yours, etc., A SURGEON.

"ARTHUR M. BUTTON, M.R.C.S., L.S.A., the late Dr. Culverwell's successor, may be consulted daily, personally or by letter, on all forms of urinary and generative ailments in both sexes. Advice to the working classes, half a guinea. Testimonial:—'I have much pleasure in expressing the good opinion I entertain of Mr. A. M. Button's professional abilities and acquirements. He well deserves the confidence of his patients.—JOHN HILTON, F.R.S., Surgeon to Guy's Hospital.'"

DR. KEILL.—SIR,—I should be much obliged to any of your readers who could give me information (or tell me where it may be obtained, if any exists) concerning the two brothers Keill mentioned in the following epitaph. The epitaph is copied from a handsome monument in the chancel of St. Giles' church, Northampton.

Yours, etc., NORTHAMPTONENSIS.

H. S. E.
JACOBUS KEILL, M.D., Scoto-Britannus,
Qui multiplici doctrinâ instructus
Et ingenio ad omnia parato
Medicinæ viam patefecit cultu anatomico.
Medendi usibus accommodavit scientias mathematicas,
Easque methodos quas ratiocinatione exploravit
Confirmavit experientiâ.
Qui post scientiam hinc inde acquisitam
Et prælectiones in utrâque Academiâ habitas
In hâc tandem urbe
Incredibili incolarum commodo
Artem medicinam feliciter exercuit,
Ubi ob indolem egregiam
Mores suavissimos
Et scientiam utilissimam
Omnibus ubicunque
Quotquot vel ingenii vel eruditionis
Vel sanitatis suæ erant amantes
Charus imprimis vixit,
Occidit desideratissimus
Nulli tamen mortalium
Aut charior vixit, aut occidit desideratior
Quam JOHANNI KEILL, M.D.,
Inter Oxonienses Professori Astronomiæ,
Qui fratri dilectissimo
Et de se preclare merito
Monumentum hoc
Amoris sui gratitudinis indicium
Posuit.
Obiit A.D. 1719 die Julii 16
Æt. suæ 47.

BRITISH MEDICAL ASSOCIATION.

ANY qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members of the Association, shall be admitted a member at any time by the Committee of Council, or by the Council of any branch. The subscription is One Guinea annually, due on January 1st; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year.

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COMMUNICATIONS have been received from:—Mr. W. H. EDDIE; Mr. SOLOMON; Dr. E. PIERCE; Dr. SELLORS; Mr. INGRAM; Mr. A. URE; Mr. J. STEPHENS; Dr. BEALE; Mr. P. C. PRICE; M. T. M. STONE; and Dr. E. H. GREENHOW.

BOOKS RECEIVED.

1. A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M.A.Cantab. In Four Volumes. Volume the First, General Pathology. London: John W. Parker and Son. 1860.
2. London Medical Practice: its Sins and Shortoomings. By a Physician. London: Simpkin, Marshall, and Co. 1860.

A Lecture
ON URINARY CALCULI.

BY

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[*Continued from page* 3.]

Class II. *Calculi which Leave a Considerable Quantity of Fixed Residue after Exposure to a Red Heat.*

Oxalate of Lime Calculi. I have seen an oxalate of lime calculus not larger than the 1-500th of an inch, and have traced the formation of these stones through their several stages. I believe that the dumb-bell crystals formed in the kidney, in the first place become aggregated together (Fig. 54); crystalline matter is then deposited in the interstices, and gradually a microscopic calculus results, as represented in Fig. 55. These minute calculi remain probably for some time in the kidney, and slowly increase until they form the concretions known as the hempseed calculi. Not unfrequently a number of them are found in the kidney, and pass down the ureter one after the other at various intervals of time. Sometimes one becomes impacted, and gives rise to the most serious and distressing symptoms. Having arrived at the bladder the slow deposition of the oxalate may continue, or layers of uric acid or phosphate may be deposited, according to the state of the urine. In cases where the oxalate increases, the surface becomes tuberculated, in consequence of the irregular deposition of the salt; the colour varies from a pale brown to a dark brown purple. They are commonly called the mulberry calculi. Such stones often attain a large size. They are very heavy and hard. On section, the laminæ are well seen, and you may often observe that the calculous matter has been deposited most unequally.

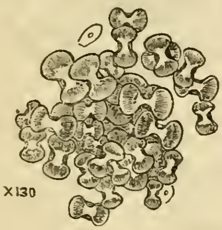

Fig. 54.—Small collection of dumb-bells, such as often forms the nucleus of a calculus.

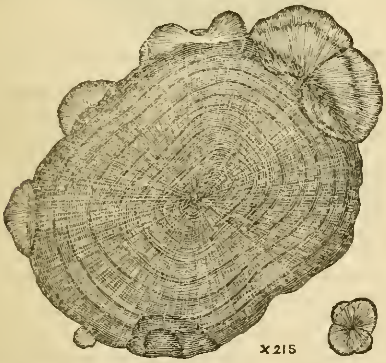

Fig. 55.—A very small oxalate of lime calculus formed from a collection of dumb-bells, parts of some of which are still seen on its external surface. *a.* A much smaller calculus, consisting of two dumb-bells.

Occasionally the oxalate of lime is deposited almost colourless and crystalline. Dr. Prout figures one of these calculi. I show you a beautiful specimen, which was given me by my friend Dr. Gibb, and was obtained from the horse. You can see distinctly the large octohedral crystals all over it. These are some of the small hempseed calculi, white on the surface, and they also exhibit numerous beautiful crystals, although they are smaller than those in the last specimen.

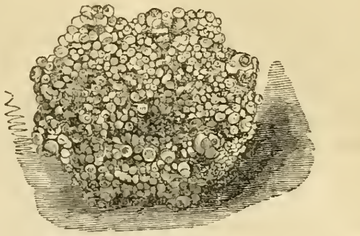

Fig. 56.—A form of the mulberry calculus, composed of oxalate of lime, of a dark plum colour. Half the actual size.

Here is a beautiful example of another form of oxalate of lime calculus, in which the surface is of a pale brown colour, and the tubercles small and delicate compared with the mulberry calculus.

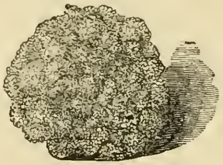

Fig. 57.—Oxalate of lime calculus, of a brown colour. Its surface was very uneven. The figure represents the calculus of its natural size.

Oxalate of lime calculi often give rise to extreme pain when impacted in the kidney, and while passing down the ureter, or lodged in the bladder. In the kidney the pain is often of the most violent character, and frequently the patient suffers from many attacks before the stone is dislodged. Very frequently hæmorrhage occurs, and sometimes inflammation is excited, which terminates in the suppuration of the tissues contiguous to the stone.

Occasionally, however, in *post mortem* examinations, we are somewhat surprised to find these calculi in the kidney, although the patient never suffered the slightest symptom during life. Here is a calculus the size of an almond, which was found fixed very firmly in one of the ureters of a man who died of another malady. Although its surface is rough, and it is half-an-inch in diameter, it caused scarcely any uneasiness, and we had no suspicion of its existence before the man died.

This large calculus (fig. 58) was removed from a man aged 45, by Mr. James H. Ceely, of Aylesbury. Mr. McCormick sent me the following history of the case. It is not a little remarkable that a rough calculus like this, weighing twelve drachms, should have been present without causing great pain and uneasiness:—

"At the age of 15 years the patient (now 45) suffered from pain in the hypogastric region, extending along the urethra to the glans penis. At intervals during the succeeding twelve months the pain was very violent, and was at each attack followed by the evacuation of bloody urine. Occasionally since then he experienced pain in these situations, while taking horse exercise, or during unusual exertion, but *never to any great extent, and he was never compelled to seek advice.*

With these exceptions his general health, although delicate, had been good till last June (1858), when he had an accession of symptoms resembling those mentioned, but greatly aggravated. The urine, in addition to blood, contained 'gravel.' At this time he consulted Mr. Reynolds, of Thame, who detected a vesical calculus, and on the 20th September, Mr. J. H. Ceely performed the lateral operation and removed a rough, irregular, mulberry calculus, weighing twelve drachms.

"During the first ten days subsequent to the operation, the urine contained considerable quantities of pus and blood, after which time all abnormal characters disappeared, and the patient was discharged from the Bucks Infirmary perfectly well on the 8th of Oct., and had suffered little pain or inconvenience. This patient had enjoyed excellent general health during a period of twenty-nine years, notwithstanding the presence of a calculus probably during the whole period."

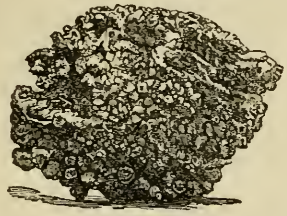

Fig. 58.—Mulberry calculus weighing twelve drachms. Two-thirds the natural size. From a photograph.

A calculus of very curious shape, the nucleus of which consisted of oxalate of lime, is described by Mr. Price in the eleventh volume of the *Transactions* of the Pathological Society. Mr. Price removed fourteen calculi from the bladder of an old man by the lateral operation of lithotomy. Two of the calculi were peculiar in possessing several spine-like projections. The largest of these was about the size of a chestnut, and from its surface projected from eight to ten spines, two of which were upwards of half an inch in length. Surrounding the oxalate of lime nucleus were several layers of uric acid and urates, with some earthy phosphate. The spines were formed of the latter salts alone, and there was no projection of the oxalate of lime nucleus into them.

The cause of their peculiar shape could not be ascertained. The stone was not in any pouch in the bladder, but was free in its cavity, and the absence of any spines projecting from the nucleus militates against the idea of the peculiar form having been given to it while in the kidney. No *post mortem* was allowed. It seems possible that the formation of the spines might have depended upon the more rapid deposition of calculous matter on those parts opposite to the intervals between the smaller calculi, than over the part of the surface in immediate contact with them. Only the two largest calculi exhibited this peculiarity.

The circumstances under which oxalate of lime was deposited were referred to when we were discussing the characters of this urinary deposit, and the formation of the dumb-bell crystals has also been alluded to. With regard to this question, it is interesting to find that both Dr. Prout and Kletzinsky have noticed deposits of oxalate of lime in patients who had had cholera, and that in two cases of this disease dumb bells were found in the urine by myself. Dr. Prout also alludes to the frequency of cases of calculous disease in those who had suffered from cholera. The concentration of the fluids which occurs in these cases is favourable to the deposition of the least soluble substances in a solid form. The intermediate stages between dumb-bells and small calculi have been observed, as I have before mentioned.

Chemical Characters. The powdered calculus is soluble in the mineral acids, and the oxalate of lime is precipitated as a white powder by ammonia. Acetic acid will not dissolve oxalate of lime. After the powder, on platinum foil, has been exposed to a dull red heat for some time, a white ash consisting of carbonate of lime remains. This gives off bubbles of carbonic acid when it is treated with an acid. If the temperature be much higher than a dull red heat, a certain quantity of the carbonate of lime undergoes conversion into quick lime, which does not effervesce on the addition of an acid.

Calculi composed of Earthy Phosphate. Both phosphate of lime and ammoniaco-magnesian phosphate enter into the composition of calculi. Dr. Prout showed that the phosphates were very often deposited upon other calculi, while there were very few instances in which uric acid, urates, or oxalate of lime, were deposited upon the phosphate. These two earthy salts enter into the composition of the *fusible calculus;* its degree of fusibility varying according to the proportion of triple phosphate present. The latter substance is easily fused in the blow pipe flame, while the phosphate of lime is quite infusible.

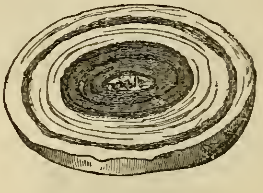

Fig. 59.—Calculus consisting principally of triple phosphate deposited round a smaller calculus composed of uric acid.

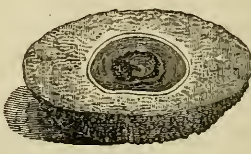

Fig. 60.—Calculus composed of phosphate of lime.

When the calculus contains but a mere trace of triple phosphate, its structure is dense and even, it is heavy, and its surface is smooth and polished; but large calculi of this kind are exceedingly rare. A small quantity of triple phosphate is almost always present in the large calculi. Portions of the laminæ of these calculi are easily broken off.

Phosphate of lime calculi are often found in the kidney. In some cases the whole of the pelvis is occupied with calculi, varying in size and shape, mixed with a considerable quantity of pulverulent matter like fine sand. Each particle of this is found, upon microscopical examination, to consist of a minute calculus, containing a certain quantity of organic matter, probably mucus and disintegrated epithelium, for its nucleus. Several of these calculi are represented in the *Illustrations*, Calculi I, Fig. 1.

Occasionally a phosphatic calculus lodged in the pelvis of the kidney gradually increases until a large calculous mass is formed by the deposition of earthy salts, layer after layer, until the whole pelvis of the kidney is occupied with it, and its prolongations extend into the infundibula and calyces.

The calculus, which consists almost entirely of triple phosphate, has a very porous structure, it is light, easily broken down by pressure, and perfectly white. Its surface is rough, and large crystals of triple phosphate can often be discerned upon the surface with an ordinary lens.

In the deposition of phosphatic calculi, the alkali which causes the precipitation of the phosphates is secreted, according to Dr. G. O. Rees, by the mucous membrane of the bladder. The earthy salts are precipitated from the urine, not *secreted* from the mucous membrane, as was formerly supposed.

Chemical Characters. The phosphate of lime calculus is infusible. It contains, like other calculi, a little animal matter, but this is often so small that laminæ which have been exposed to a red heat retain their general characters after ignition. It is soluble in the mineral acids, and slowly in acetic acid. Phosphate of lime is precipitated in an amorphous form when the acid solution is neutralised with ammonia. When oxalate of ammonia is added to the acetic acid solution, a precipitate of oxalate of lime is formed.

The calculus composed of triple phosphate and phosphate of lime is fusible. The solution in acids, when neutralised by ammonia, gives a precipitate of ammoniaco-magnesian phosphate in stellate crystals, and a little phosphate of lime in an amorphous form. The quantity of phosphate of lime present is sometimes so small that the solution in acetic acid does not give a precipitate when oxalate of ammonia is added. Calculi composed of triple phosphate generally contain more mucus and organic matter than the other phosphatic calculi.

Carbonate of Lime Calculi, though common among herbivorous animals, have rarely been met with in man. They are friable and sometimes perfectly white. Mr. Smith has described some which are very like the mulberry calculi (*Med.-Chir. Trans.* vol. ix., p. 14). There are specimens of this form in the Oxford museum among Mr. Hitchings' collection, but unfortunately no history is attached to them. Dr. Thudichum states that he has examined prostatic concretions which consisted almost entirely of carbonate of lime. A small quantity of carbonate of lime is usually deposited with the earthy phosphates.

This calculus effervesces freely when exposed to the action of acids previous to incineration; white oxalate of lime yields carbonate only after having been exposed to a red heat.

Silicic Acid Calculi. I have never met with calculi which contained silica; but Berzelius, Vauquelin and Fourcroy, and Mr. Venables and others, have detected it. It exists usually in very small quantity only, and in order to obtain it a considerable quantity of the calculus must be operated upon.

Prostatic Calculi. These calculi vary very much in size. The small ones are generally roundish, but often the sides are more or less flattened when many have been lying in apposition. They are generally hard and white, like porcelain or alabaster. The surface is generally perfectly smooth. They consist of organic material, with phosphate of lime and a trace of carbonate; but it is seldom that triple phosphate is to be detected. The earthy matter may vary from 50 to 90 per cent.

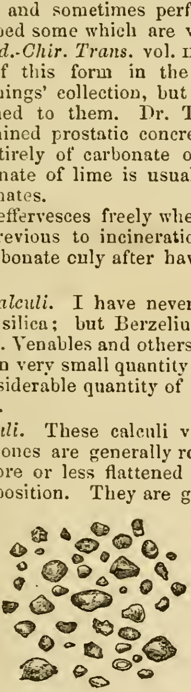

Fig. 61.—Small prostatic calculi. Natural size.

These calculi are formed in the follicles of the prostate gland, and commence as minute very transparent concretions, which contain scarcely any hard calcareous material, and at this early period of their formation, therefore, are not entitled to the name of calculi. The microscopic concretions have been detected in the follicles during the periods of youth and early manhood by Mr. Thompson, who states that he found them in every one of a series of fifty prostates which he subjected to examination. In old age, as is well known, they are often found of considerable size. When small, they do not give rise to any symptoms, but they may increase in size and number, and cause the greatest inconvenience and distress.

In the sections of the prostate which I show you, from a man of about forty years of age, who died from pneumonia, the various stages of growth of these concretions can be observed. The specimen has been immersed in glycerine, in order to increase its transparency, and is placed under a power of 215 diameters. Each follicle of the gland is seen to be occupied with many small roundish bodies, and a considerable number of epithelial particles. Many of the follicles are distended by a number of transparent microscopic concretions, varying from a pale yellow colour to a dark reddish brown. Some of the smallest are not more than the one two-thousandth of an inch in diameter, and yet these are seen to be composed of several concentric layers. In the centre of almost all the concretions you cannot fail to notice a quantity of minute globules, and in some you can see one or more roundish cells most distinctly. These, in fact, constitute the nucleus of the concretion. The concretions under observation consist entirely of organic matter which resists the action of moderately strong solution of potash and acetic acid. It is an albuminous material, which, in its chemical characters, agrees with the substance of which the cell wall is composed. The walls of hydatid cysts, and some of the elastic albuminoid concretions occasionally found in the peritoneal cavity, and in other situations, are composed of a substance closely allied to this. These bodies, I believe, are formed by the slow deposition of albuminous matter round a nucleus consisting of epithelial cells or *debris.* The material which is deposited in successive layers is probably the same which enters into the composition of the cells. It is sometimes colourless, but more commonly of a yellowish colour, and sometimes reddish. A small concretion being once formed, new matter is poured out from the lining membrane of the follicle, deposited on it, and gradually becomes hardened by the absorption of its fluid constituents. At present there is very little earthy matter in the concretion, but gradually a change takes place, and granules of phosphate of lime are precipitated in the substance of the transparent organic matter. This change having commenced, the further separation of calcareous matter goes on. The particles already formed increase by attracting more phosphate from the surrounding fluid, which holds it in solution. As the concretion enlarges the proportion of phosphatic salts to the organic matter becomes greater, and a *prostatic calculus* at last results. The calculus may attain a very large size, and may even extend forwards into the urethra and backwards into the bladder. The characters of these concretions are well described by Mr. Thompson, whose remarks are illustrated by careful drawings (*The Enlarged Prostate.* Plates iv and v, page 265). The account above given only differs slightly from the view entertained by Mr. Thompson, who thinks that the concretions are first formed by the coalescence of the small yellow bodies or granules, which afterwards coalesce and form a small mass. Professor Quekett considers that they commence by a deposit of earthy matter in the secreting cells of the gland, while Dr. Handfield Jones believes that the concretions originate in a vesicle, which increases by endogenous growth.

You may see in various parts of the preparation concretions, the nucleus of which appears to consist of granular matter; others in which concentric layers may be traced to a central point; some which have a perfectly transparent centre; and not a few in which the nucleus is composed of small granular cells, varying in number from one to twenty, or more (*Illustrations,* Calculi Plate i, Fig. 4, *b*, *c*). For further information on this interesting subject, I must refer you to Mr. Thompson's excellent monograph on *The Enlarged Prostate*, where you will find the question of diagnosis and treatment fully discussed.

[*To be continued.*]

Original Communications.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

V.—Operations on the Eye.

[*Continued from p.* 12.]

Case clxxxvi. M., aged 45, had been growing blind for nearly six years, but he had only given up work a fortnight before I saw him. He had so sunken an eye and so overhanging a brow that it was difficult to operate. I made a puncture in the cornea of the right eye, and finished the section with the convex knife and scissars. He had an excellent recovery, and went away with a circular pupils and good sight.

About a year afterwards, he came up to have the other eye done. I therefore extracted the left lens, and he recovered speedily, and both his pupils were round and active.

Case clxxxvii. M., aged about 60. I operated first on the right eye with an upper section, and extracted the lens easily; and then, also by an upper section, I operated on the left eye. On the twelfth day after the operation, he could see the time by my watch without a glass. He went home with circular pupils and excellent sight in each eye.

Case clxxxviii. M., aged 67, was operated on six years before in the right eye, and recovered his sight for awhile, but it gradually was lost. I made the upper section in the left eye, standing in front; and removed the lens easily. He recovered good sight, and was able to work.

Case clxxxix. M., aged 71. The right eye had been unsuccessfully operated on before. I made the lower section in the left eye; but, immediately on its completion, the lens and some vitreous humour started out upon his cheek. He had excessive spasmodic contraction of his orbicularis palpebrarum. Went home with improved sight.

Case cxc. F., aged 70. Deeply sunken eyes and prominent brows. I operated on both eyes, making the lower section in the left eye, and upper section in the right. She recovered, with very good sight in the left eye; but in the right it was not so clear.

Case cxci. F., aged 63. The right eye was amaurotic; I extracted the lens in the left. She was very faint during the operation, but recovered with very good sight.

Case cxcii. F., aged 65. The left was a sightless eye; the left had been blind from cataract for three months. I made the upper section with difficulty, owing to her unsteadiness; and, as soon as it was completed, she jumped out and jerked out the lens from her eye, with a considerable quantity of vitreous humour. Her eye looked a little collapsed afterwards. She recovered well, and went home with very good sight.

Case cxciii. F., aged 64. I operated on the right eye by the upper section (the cataract in the left was incipient), and removed the lens with a small quantity of vitreous humour. She had a little pain afterwards, and I applied some belladonna at night. She went home in twelve days, with a clear circular pupil and good sight.

Case cxciv. F., aged 73, excessively deaf. I operated on the left eye, and extracted a large amber coloured lens by the lower section. A little vitreous humour followed. She recovered with excellent sight, and could see to read well for four or five years afterwards, when she died. The pupil was a little drawn downwards.

Case cxcv. F., aged 74. I operated on the right eye by upper section, slightly wounding the margin of the pupil. She recovered well, and went home on the eighth day with excellent sight, but complaining much of having been made a prisoner so long. She saw well for some years after, when I lost sight of her.

Case cxcvi. M., aged 71. I operated on the left eye in the month of August, during some of the hottest weather we have had for years. A little vitreous humour escaped with the cataract. He recovered very well, and in seven days was able to open his eye and see clearly.

Case cxcvii. F., aged 56. I operated on the left eye. She recovered well in ten days, although she was a feeble, unhealthy person. A year afterwards, I operated on the right eye (left left remaining quite sound and useful); and she had inflammation following the operation, and went home before the eye had recovered itself. I do not know the result of this second operation.

Case cxcviii. M., aged 58. I operated on the left eye by lower section. On the eighth day, pain in the brow and head came on, and the pupil became irregular and contracted. I gave him some calomel and opium pills until the mouth became sore, when his eye cleared; but when he went home, the sight was still somewhat imperfect.

Case cxcix. M., aged 72. Amaurosis of the left eye, and cataract in both. I operated on the right eye, just touching the iris with the knife, so that it bled. The corneal flap was disposed to fall down under the lid. He recovered with good sight and a circular pupil, although the iris had been touched.

Case cc. M., aged 60. The left eye had been lost in early life by accident. Cataract in the right for two years and a half. I operated on the right, and made the upper section. He recovered well, and went home with excellent sight. This operation was performed in the winter.

Case cci. M., aged 56, with cataract in the right eye of six years standing, in the left only six weeks. I operated on the right. The eye was very tense, and the iris flapped in front of the knife, so that I was obliged to withdraw it, and complete the section with the convex knife. About the fifth day, inflammation came on, and required some active treatment with mercury; and he went back with good sight.

He came back the next year, and underwent an operation on his left eye, the lens and some vitreous humour escaping. He returned home with good sight in both eyes.

Case ccii. F., aged 59. I extracted the left cataract by an upper section, standing in front of the patient; the incision requiring to be a little enlarged with the convex knife before the lens would escape readily. The flap of the cornea was much disposed to fall down. She recovered with a closed pupil, which I incised with the iris-knife, and she saw well at once. In the course of two years afterwards, the sight became dull again.

Case cciii. M., aged 59, with cataract in each eye, and external strabismus and amaurosis in addition in the left. I operated on the right eye, making an upper section, and extracting the lens easily. He saw my watch afterwards, and recovered with fair sight. A year afterwards, he became amaurotic.

Case cciv. M., aged 54. His left eye was amaurotic. I operated on the right, and extracted the lens without accident. He was well, with good sight, by the eighth day.

Case ccv. M., aged 55. I operated on both eyes; the lower section in the left eye, the upper section in the right. He recovered without a bad symptom, and by the eleventh day his sight was strong and clear in both eyes.

Case ccvi. M., aged 63, with cataracts in both. I was obliged slightly to enlarge the incision in the left, when the lens escaped readily; and then I operated on the right. He had recovered his sight and his eyes were strong by the eighth day.

Case ccvii. F., aged 72. The right lens was tremulous. I extracted the left, and she at once exclaimed that she saw a purple light. She went on well, and recovered with good sight and a regular pupil.

Case ccviii. M., aged 72, a restless and unsteady patient. I extracted first the left by a lower section, and then the right by an upper section; with the latter, a little vitreous humour escaped. On the fifth day, he opened his eyes, and saw well with each; but on the sixth the right became inflamed, and the case terminated by his having good sight in the left eye, and closed pupil, with but little sight, in the right.

Case ccix. F., aged 60. I operated on the right by upper section from behind; and there was so great a strain upon the globe, that a jet of aqueous humour flew into my face. She recovered with excellent sight.

Case ccx. F., aged 58. I made the upper section in the right eye, and she recovered after rather a longer time than usual; but her sight was very good.

Case ccxi. M., aged 55. I operated on the left; and he recovered with excellent sight, and returned to the country to his labour, and came up again the year after, when I operated on the right eye by the upper section, and he went home again on the thirteenth day with very good sight in both eyes.

Case ccxii. M., aged 70. I operated on the right, a remarkably sunken eye; and touched the iris in making the upper section. The lens escaped easily, but there was a little clot in the anterior chamber. Immediately after the operation, he saw blue light towards the right, and red towards the left. On the third day, he opened his eye and looked about, and he went home with very good sight.

Case ccxiii. M., aged 60. I operated on the left; and, finding that I could not complete the section without wounding the iris, I withdrew the knife, and finished with the convex-edged one. Some fluid vitreous humour accompanied the exit of the lens. He recovered speedily and well, and had good sight.

Case ccxiv. M., aged 71. I operated on the right eye, and extracted the lens without much difficulty, although it was not a favourable eye for the purpose. The gentleman who assisted me then operated on the left, and some little difficulty was experienced in completing the section. He went home in three weeks, with the pupil of the right eye clear and circular, and the sight good. The left was obstructed by capsule, and rather contracted.

He returned in six months, in the same state; and I introduced the fine cannula-forceps, and, laying hold of the capsule, I twisted it round and removed it. He went back with excellent sight in both eyes.

Case ccxv. F., aged 48. I operated on the left eye with a needle; and she went on well for about four days, when she went home and was married. Her eye became inflamed and very weak. I operated again, and the pupil became perfectly clear, but her eye was sightless.

About eighteen months afterwards, I made the upper section in the right eye, but with some difficulty, for she was very unsteady; and I was obliged to complete it with the convex knife, and the cataract escaped readily. She was very hysterical, and cried a great deal; but recovered well, and has good sight in this eye now, nearly six years after the operation; and she and her husband still continue to cry whenever I call upon them.

Case ccxvi. F., aged 56. I operated on the right eye, and extracted the cataract. She had subsequent inflammation, but recovered with improved sight and a very contracted pupil. I subsequently enlarged the pupil, and the sight mended.

Case ccxvii. F., aged 39. I extracted the cataract in the left eye, by lower section, and she recovered very good sight. She seemed to derive benefit during the cure from the application of the liquor belladonnæ.

Case ccxviii. M., aged 69, a noisy and complaining Hibernian. I extracted his right lens with some difficulty, as he was very unsteady. He went home in about three weeks with a very good sight and a regular pupil.

The next year he came back, having received a blow in his eye which had made the sight dull. I, therefore, operation on his left eye, making the upper section, standing in front of him. A little vitreous humour came out with the lens. He recovered with good sight.

Case ccxix. M., aged 66, with sunken eyes and strongly marked arcus senilis. I extracted the right lens, and he recovered his sight; and came up again in about two months, when I operated on the left eye, and he went home with good sight.

Case ccxx. M., aged 70. I extracted the right lens. He suffered a good deal of pain; but the wound healed, and he went away with improved but not very perfect vision.

Case ccxxi. M., aged 56. I operated in the winter on the right eye; and on the eighth day it was well, and his sight was good. He came back in six months, and I operated on the left, and the eye was tolerably strong and well on the fifth day.

Case ccxxii. F., aged 73. I operated on the right eye, just shaving the iris slightly. The lens escaped readily, but she said she saw only the light. She was extremely nervous. She made a good recovery, and sees to read and write with this eye to the present day (more than five years after the operation).

Case ccxxiii. F., aged 60. I operated on the left eye. She recovered well, and now (five years since the operation) sees well.

Case ccxxiv. F., aged 56, a fidgetty old woman, with cataracts and corneal opacities. I extracted the left lens with some difficulty, and some very fluid vitreous humour followed it. She went on well until the eleventh day, when she could see fairly, and she went home. Inflammation of the eye followed, and when I saw her, nine months afterwards, I found the pupil closed, and a section with the iris knife did not improve her vision.

The next year I operated on the right eye, in which the cornea was most opaque, and made an upper section. When the capsule was broken, the patient jerked out the cataract with a sudden movement, stamping her foot at the same time, and good deal of clear fluid vitreous humour accompanied it. She went home with her eye still weak, but with fair sight. This eye followed the same course as the other, and now (five years after the last operation) she is quite blind.

This can now hardly be called a successful case; but, at the time, both operations succeeded, and subsequent disease destroyed the sight which had been temporarily restored.

Case ccxxv. F., aged 51. I operated on the left eye in extremely hot weather. She recovered with good sight. About fifteen months afterwards I operated on the right, but the result was a closed pupil. Nine months afterwards I made the usual cut with the iris knife and she saw well at once; but the anterior chamber filled with blood, which remained fluid and red for more than a fortnight. Thinking that fresh blood was being effused, I gave her some turpentine, and it was cleared away in a few days. She had then good sight in both eyes.

Case ccxxvi. F., aged 72. I operated on the right eye, making an upper section and enlarging the incision a little with the convex knife as the lens was not disposed to turn out. A little soft matter was removed from the pupil by the curette, and she saw the hands of my watch afterwards. Some inflammation followed, and when I examined her eye the corneal flap was opaque and the pupil drawn up, and it ultimately became closed. I made a section with the iris knife, but she was but little improved. Two years afterwards I extracted the left cataract and she did well, and now (four years since) I hear that she has very good sight.

Case ccxxvii. M., aged 68. I operated on the right, and he recovered well with good sight.

Case ccxxviii. M., aged 71. (This case has been published at greater length in the Journal of May 3rd, 1856.) On making the corneal section in the left eye and trying to extract the cataract, it fell backwards into his eye and remained invisible. He recovered his sight for a time, and as the right eye gradually became more dim, the amount of vision which he retained in the left was more valuable. I afterwards extracted the right cataract, and he recovered well and had good sight.

Case ccxxix. F., aged 71. I operated on the left eye, and she did well, and now (five years after) has good sight, but the pupil is a little distorted.

Case ccxxx. F., aged 63. Upon completing the section in the left eye and rupturing the capsule some vitreous humour escaped, but the lens and capsule were adherent to the upper margin of the pupil, and I could not remove them. The cataract, however, disappeared from the axis of vision, and she recovered and went home with fair sight.

Two years and a half afterwards I saw her again, and I found that her sight had remained good for a while, and after an attack of inflammation she became blind again, and finally struck her eye with the latch of a door and destroyed it. I, therefore, operated on the right eye, and extracted the lens, but with great difficulty, for it was adherent, as in the other eye. She recovered with good sight.

Case ccxxxi. M., aged 73. I operated on the right eye, and extracted a large flat and very hard and dark cataract. Some muddy looking fluid escaped from the eye. He had a tedious recovery, and his sight being dim and the eye weak, I gave him some calomel and opium, with a blister on the temple, and under this treatment he mended, and went home with good sight.

Six months afterwards he could see to do all that he required with the right eye, but was anxious for further improvement. I, therefore, extracted the left lens, and he went home with clear corneæ and pupils, and seeing well with both eyes with a four-and-a-half inch glass.

Case ccxxxii. F., aged 72, a very restless little old woman. I operated on her right eye, and extracted the cataract with great difficulty. When the knife entered the cornea at the outer side, she struggled, and strained, and kicked so, that the point passed behind the iris. I withdrew it a little, and completed the section very slowly, the iris bulging out at each side of the knife through the wound in the cornea in consequence of her efforts. As soon as the capsule was ruptured she squeezed out the lens by sudden muscular action on the eyeball, and some vitreous humour followed. I sent her to bed with very little hope of success. The next day she had pulled off the bandage and court plaster, and was extremely restless, complaining of the martyrdom of bed. On the fifth day she told me she could see as well as ever she could, and her eye was strong. She went home soon afterwards with good sight.

Case ccxxxiii. M., aged 62. I operated on right eye, and he went home shortly after with excellent sight.

A year afterwards I operated on the left, and he recovered his sight in this eye also, the pupil being a little distorted, in consequence of a blow which he gave it a week after the operation.

Case ccxxxiv. M., aged 56. I operated on the left eye, and he went home in about three weeks with good sight. He came up for a second operation the year afterwards, and did very well, going back to his work with good sight in both eyes.

Case ccxxxv. F., aged 65. I operated on the right eye, in which cataract had existed five years, and removed a flat, hard, and dark amber lens. She described the light as of a violet colour. She went home with excellent sight.

Case ccxxxvi. F., aged 78, a strong, healthy old woman. I operated on both eyes, and she went home with excellent sight in them. I have seen her lately, now four years after the operation, and she sees well with both, being 82 years of age.

Case ccxxxvii. F., aged 47. I operated on the right eye, and she recovered excellent sight.

Case ccxxxviii. M., aged 80, had cataracts in both eyes; but a year before I saw him he struck the right eye with the point of a rake, and thus regained enough sight to enable him to get about his farm and do a little work. This, however, afterwards failed, and the iris became tremulous, and I, therefore, operated on his left eye. He went on well until the ninth day, when I found him walking about with a clean and large pupil and very good sight. The next day his eye was painful and inflamed, and he complained of headache, and a week afterwards he said he could see nothing. When I could examine the eye fairly I found the iris rather green, but the pupil was circular, while the cornea was hazy, and altogether it looked very unpromising. He said that in the night before the inflammation came on he struck his eye, and this explained his state satisfactorily. His sight became much better before he left, and a month after his return home his sight was improving. I heard of him again a year and a half afterwards, and he had then excellent sight, and was able to attend to his farm. The blow on the eye in this case caused effusion of blood into the anterior chamber, and the absorption of it restored his vision.

[*To be continued.*]

REMARKS ON OBSTRUCTION OF THE BOWELS: WITH CASES.

By Edward Copeman, M.D., M.R.C.P., F.R.C.S., Physician to the Norfolk and Norwich Hospital.

[*Continued from p. 994 of volume for 1860.*]

Case xiv. *Fatal Obstruction from partial Stricture leading to Impaction: Cæcum opened by operation.* On July 20, 1857, I saw Mr. ——, aged 48, a wealthy farmer, accustomed to generous diet, and not particular in his choice of food, ruddy and portly; general health good, but occasionally interrupted by pain in the abdomen and constipation, which a dose of castor-oil had always hitherto removed. He had been suffering from obstruction of the bowels since Thursday the 16th, and had taken castor-oil without effect; neither had the most assiduous application of all the usual means of treatment produced any relief. He had several times vomited stercoraceous matter; the abdomen was tumid, with a sense of general fulness; and in the right iliac region, there was tenderness on pressure with dulness on percussion, a sense of fluctuation, and also to my perception, although not to that of the others present, a feeling like the crepitation of air under the pressure of the fingers, or the creaking of inflamed surfaces of serous membrane rubbing against each other. Pulse small and rapid; general exhaustion; intellect clear; and manner composed, although he was under the strong impression of approaching death. We tried to inflate the bowels; but it was of no use. A consultation with the two surgeons who were attending him, Mr. Cadge of Norwich and myself being present, was then held to consider whether any form of operation could be practised with a chance of success. It was very difficult to determine where the obstruction had taken place; the tender spot in the right iliac region marked the seat of the mischief, and we thought it most likely that the ileum near its termination was the bowel strictured. It might, however, be the cæcum, although there was no very marked bulging in the right loin. At length we determined that if an operation were performed, it ought to be in the situation of the tender part, which, at all events to myself, had afforded the emphysematous sensation to the fingers. Our reasoning was, that if the bowel had there undergone any serous change, an opening elsewhere would not save it; and should it turn out to be the ileum, it would be of no use to open the colon in the loin. As there seemed to be no possibility of saving life in any other way, we decided to cut down to the bowel at the most tender spot, and then endeavour to make out the nature and situation of the obstruction and relieve it; or if the bowel seemed disorganised, to open it, and discharge its contents by an artificial anus. At four o'clock the next morning the operation was performed; and on uncovering the bowel, it was found to be dark-coloured, and so tender that it ruptured under the pressure of a director; it was therefore freely laid open and secured to the edges of the wound, having discharged a very large quantity of liquid fæcal matter, black currants, etc. The peritoneal cavity was protected by adhesions which had formed around the injured part. The stricture was not discovered; but from the distance the finger could be passed towards the right loin, and the large calibre of the bowel, it was presumed to be the cæcum that was opened. The wound was partly closed by sutures, and a sponge fastened over the rest of it. The patient was remarkably relieved in all respects for several hours: but afterwards, fæcal matter ceased to escape by the wound, sickness and abdominal pain returned; and after lingering, I believe, two days, he died.

On examination, it was found that the cæcum was the part which had been opened in operation; and it still contained large quantities of whole currants, pieces of bone, and other imperfectly digested substances. The seat of stricture was the middle of the transverse arch of the colon, where the bowel was narrowed, but not sufficiently to arrest the progress of a proper quantity of healthy, natural fæcal matter, neither very large nor solid; it would not allow, however, the passage of the enormous quantity of all kinds of indigestible matter which had accumulated in the cæcum, and had thus become the cause of fatal impaction. The obstruction was sufficient to paralyse the cæcum, which was not able to discharge its contents even after it had been opened by operation.

CASE XV. *Obstipation from the Stricture of the Rectum.* In December 1858, I visited a clergyman, the history of whose complaints is as follows. He consulted me several years ago for piles, to which he had long been subject; and I understood he had since at various times suffered from colic and constipation, having had a more painful attack than usual in the early part of this year. From that time up to the Tuesday before I saw him he was as well as usual, taking food heartily and indiscriminately, and, as was his custom, swallowing it quickly without proper mastication. His bowels had been kept in a regular state by an electuary prescribed by his surgeon, and his general health was good. He was 65 years of age, and a person of active habits. Early on Tuesday morning, December 21st, 1858, he was seized with pain in the body and constipation, which induced him to send for his surgeon, who treated him as on former occasions, but this time without success. He gave him calomel, colocynth, salines, castor and croton oil, injections, etc.; but nothing answered; he had no motion; his abdomen became tumid and tympanitic, and he could get no sleep; and as these symptoms increased, I was summoned in the afternoon of Thursday, December 23rd, and found him in a very critical state. There had not been the slightest fæcal evacuation since Tuesday morning; the abdomen was much distended, and he had every now and then severe tormina, the abdominal walls becoming spasmodically contracted, and causing him to writhe in pain. The coils of bowel were distinctly marked, especially during these painful contractions; but there was not much tenderness in the intervals. He had no fever; the pulse was between 80 and 90; there was no sickness; the tongue was not much furred. The purgative plan had, as I thought, been carried far enough, and signally failed. We tried an injection of soap and water and oil; but it came away untinged, although passed through a long stomach-pump tube, which had gone more than a foot up the bowel. We then tried inflation with a pair of bellows, but could not get the air to pass along the canal. We therefore covered the abdomen with a warm bran-poultice sprinkled with laudanum, and gave every hour or two a pill containing a grain of watery extract of aloes and half a grain of opium. He had been in a warm bath several times, which soothed a little for a time; but I left him late at night with a very unfavourable impression as to the result of his illness. There was no one part of the abdomen more tender than another, nor any indication as to the precise seat or nature of the obstruction. On the following day, I received a message that he had passed a very uncomfortable night, being frequently in great pain. There had been no evacuation from the bowels; he had some difficulty also in passing urine, which had to be drawn off in the morning, and was high-coloured and disagreeable in smell. I saw him at night; his general condition was much the same; he had taken the pill almost every hour, but the bowels had not been relieved. The abdomen was still much distended, but not tender on pressure. The pulse was under 100, and weaker. He had no sickness, but slight hiccough occasionally, and frequent hawking of what he called "mucus" from the œsophagus; he had used several injections himself during the day, and sometimes a little air escaped. We gave him an enema with sulphate of magnesia, jalap, and castor-oil, but it immediately returned as it went up. We then tried inflation again by means of a well-acting enema-syringe, and after a while succeeded in forcing air all along the colon, producing a considerable rumbling in the bowels, some of the air coming away again with loud reports, with some relief to the pain and tension. There was, however, no fæcal smell, and on continuing the inflation a little longer, we heard the air passing in the situation of the cæcum, but as he complained of more distension we discontinued it. Almost immediately afterwards we heard a loud rushing of air along the canal, as if it had suddenly forced its way through some obstruction, and the upper half of the abdomen became painfully tense, causing him great uneasiness, for which we gave him a dose or two of liquor opii sedativus. He became much exhausted with the pain and distension, and we could not get the air to pass away, although we introduced a very long stomach-pump tube its entire length into the bowel, leading us to infer that the air was not pent up in the colon, but in the small intestines. I stayed with him all night, and left him on the morning of Saturday, December 25th, comparatively easy as to abdominal pain, but with the abdomen immensely distended, he having had no evacuation from the bowels, except a little mucus from the rectum. He was much worn with the long continued pain and want of sleep. The pulse was 120; the countenance anxious; the nervous power was decidedly diminishing; and there was no increased probability of intestinal evacuation. He had slight hiccup, and occasional gulping up of fluid from the stomach, but no actual vomiting or feeling of sickness. The pills were ordered to be continued as before. Bran poultice, and an opiate draught in addition to the pills, if in more pain, were also ordered.

I visited him again next day, December 26th, and found him much easier, although the abdomen was still very large and tense. There were no signs of peritonitis, and there had been no sickness. Nothing had passed from the bowels. The same treatment was continued. We passed a stomach-pump tube of considerable length, but neither air nor fluid escaped; and an injection of warm water passed through it returned uncoloured.

December 28th. I found him in the same state. He had no fever, no vomiting; the pulse was 100. There was no evacuation, nor sign of peritonitis, but a countenance indicative of serious mischief. His mind was quite collected. He had taken the opium and aloes pill regularly; and we now gave him, almost at his own request, two drops of croton oil. I left him in the night with the impression that he could not live; and heard that he died about ten o'clock the next morning, without much suffering, and with a mind clear and collected to the last.

At 4 P.M., on the 30th, we examined the body, and found that the cause of mischief was a stricture of the upper portion of the rectum. The sigmoid flexure of the colon was enlarged beyond what I have ever seen before, and, when laid open, measured more than a foot in width. It seemed to form two distinct pouches, each as big as an ordinarily sized stomach, and occupied the whole central portion of the abdomen, from the pubes to the epigastrium, and from one crest of the ileum to the other. The small intestines lay behind it, compressed and empty; and the colon, distended, but not immoderately, bounded it from the cæcum to the natural site of the sigmoid flexure. There was no trace of peritonitis; the contents of the bowels were of a relaxed nature, pulpy, and such as ought to have passed readily through any slight obstruction; but the mucous lining of this enormously dilated and enlarged sigmoid flexure, in which all the fæcal matter and air were contained, was softened and intensely congested; and the walls of the intestine were in places a quarter of an inch or more in thickness, from long continued distension and infiltration. This enormous dilatation had evidently been the result of several years more or less obstruction to the free passage of fæcal matter into the rectum, on account of an organic narrowing at the point where the colon and rectum unite; and no doubt, in the present attack, the constriction was rendered greater, and indeed impenetrable, by the *enormous* distension and displacement of the bowel immediately above it. I never saw a human stomach half so large as this diseased portion of colon. There was no great thickening around the stricture; but it was sufficiently tight to prevent the fluid fæcal matter running through it when the bowel above it was held straight up.

This case is remarkable and instructive in several points of view. The diagnosis that there was no peritoneal inflammation, was perfectly correct; and the expected effect of the treatment, in relieving spasm and softening the contents of the bowels by aloes and opium, fully realised. The absence of sickness was a reason for suspecting the cause of the obstruction to exist in the large intestines rather than in the small. But then, again, where did the very long tube go which we passed up into the bowel its whole length, or rather, which the patient himself passed easily and without giving himself any pain? It seemed to pass straight along the bowel, and if so, must have reached far into the colon. Was it doubled up in the rectum? One would have thought if it *had* entered the enlarged sigmoid flexure, both liquid fæces and flatus, of which it was full, must have passed through it and relieved him; and yet, it seems impossible for the rectem to have contained the whole of it doubled up without its either occasioning pain, or being able to be felt by the finger. It did not certainly pass into the cavity of the abdomen, nor had it done injury to any part with which it came in contact.

We may add this case to a long list of others which prove not only the irremediable nature of the disease, but also the impossibility of arriving at a satisfactory and clear diagnosis either of the precise seat or the exact nature of the fatal obstruction. Increased experience of cases of this nature strengthen the conviction, in my mind, that purgatives are not only frequently ineffectual, but positively injurious; increasing the amount of stricture, whatever may be its cause, by forcing down upon it a larger quantity of material, and exciting a degree of spasmodic resistance in addition to that occasioned by the previously existing mechanical impediment. I believe aloes and opium to be the best medicine to give internally; the former to liquefy the fæcal contents, and the latter to relieve spasm; and that after one or two trials, with an aperient, all our further efforts to force a passage should be directed to the rectal end of the canal.

Case xvi. *Obstruction of the Bowels from Impaction: Recovery.* February 11th, 1852. Mr. ——, aged 65, a very healthy retired tradesman, had been in the habit of taking Morison's pills occasionally for years, believing them to have been of great service to him. He took two or three doses a week before I saw him, which produced violent purging, followed by pain in the situation of the ileo-cæcal valve. This pain continued without intermission until the day of my visit, and I found considerable tenderness on pressure. He had had no relief from the bowels for several days, and the pain in the right side of the abdomen was at times very severe; there was also fulness in the same situation, but not a great deal of constitutional disturbance. Six leeches were then applied, followed by fomentations, and he took a dose of calomel and Dover's powder.

February 12th. Pain relieved, but not removed. No action in the bowels. Six more leeches were applied.

February 13th. He had an enema this morning, which brought away a large quantity of lumpy fæcal matter. Pain much less. Powder repeated at night.

February 14th. Another enema this morning, after which the bowels acted three times, and he was quite free from pain.

February 16th. I was called to him in the middle of the night on account of a return of severe pain; for this he had six more leeches, followed by poultices; also another dose of calomel and Dover's powder, and a mixture containing ammonia and laudanum. At 10·30 A.M., he was still in pain, but it was less severe; the pulse was not quickened, nor was there any fever. The abdomen was kept covered with bran poultices; and as there was no relief from the bowels, and the abdomen was full and tense, I gave him half an ounce of castor-oil and twenty minims of laudanum. At 7 P.M., I found he had had a good deal of pain all day, and at 4 o'clock he vomited. At 6·30 he had an enema, part of which returned with a little fæcal matter, since which he has been easier. Abdomen still tumid, but not so tense as in the morning. There was no general peritoneal pain, but considerable tenderness still in the original spot near the ileo-cæcal valve, with a sensation occasionally as of something passing there. Pulse quiet; tongue but little furred. I ordered turpentine stupes to the abdomen, and a draught, with tartrate of potash and rhubarb.

Another enema was given the following morning, which brought away a considerable quantity of hard, lumpy matter, with great relief to the patient. The treatment was continued for a few days; the bowels were effectually emptied; and although at one time he seemed to be on the verge of peritonitis, he very soon got well. Indeed, it was very difficult to determine whether or not peritoneal inflammation had actually set in; but the quiet pulse and absence of constitutional disturbance, led me to decide this in the negative, although the merely local symptoms were severe enough to give rise to the suspicion. I imagine the strong action of Morison's pills had so irritated the bowels as to induce them to contract upon their solid contents, and prevent their further movement along the intestinal canal.

[*To be continued.*]

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

CHRONIC CEREBRAL DISEASES.

By HENRY DUNCALFE, M.R.C.S., West Bromwich.

[Read October 19th, 1860.]

THE cases about to be detailed in this paper are intended to exemplify certain chronic affections of the brain, during the course of which either active congestions or acute partial inflammations ensue from time to time.

In the majority of such cases, where inflammation of the brain has been proved to have existed, the patients had been subject from various causes to great mental excitement; and one object I have in view is to give this fact a prominent place for the consideration of the meeting. It is impossible to overrate the importance of this great predisposing and exciting cause, and the early recognition of an overworked brain may be frequently the index to a plan of treatment which will deprive death of a victim, and restore to a healthy condition those states of depraved vitality which give rise to symptoms which are often regarded as nervous or hysterical. How well has Barclay described the affinity between the symptoms of disordered function and those of diseased structure; and how graphically has he described the effects which are produced by such mental emotions. "Sometimes," he says, "functional disturbance can scarcely be discriminated from mental alienation. The overworked brain of the professional man who is labouring after eminence or wealth, and still more, the over-excited brain of the stock-jobber, or speculator, after a time becomes exhausted, and unfit for the longer performance of duties beyond its strength, and apoplexy, paralysis, meningitis, or dementia, put a stop to his foolish schemes." Prolonged bodily exertion, intemperance, and diseases of the heart and blood-vessels, are also amongst the causes which induce these diseases.

Dr. Forbes Winslow, in his recent work *On Obscure Diseases of the Brain*, says: "In the premonitory stage of insanity the grey portion of the hemispherical ganglia is frequently in a state of capillary congestion. This pathological condition is easily dealt with, and the further progress of the disease arrested by therapeutic measures."

CASE I. A tall, thin, and well educated woman, aged 50, married, and having had a large family, but having only two children living, came under my care. There is no history of any particular form of disease in any other member of her family, or any of her ancestors. By birth the daughter of a solicitor, her health up to the time of her marriage had been guarded with the greatest care. From a position of affluence and a home surrounded with every comfort, she was suddenly reduced to poverty, and obliged to leave both home and country. Whilst abroad, she was subject to many hardships; and had, in addition, to endure the affliction caused by the death of five of her children. Her life was for years one uninterrupted course of trial and trouble; but, endowed with a spirit of perseverance and endurance, she had nobly struggled with every adversity, and was finally rewarded by a return to her native country, to a settled home, and easy circumstances. It was soon after this (now about three years ago), and at a time when all anxiety for the future had ceased, that her present and fatal illness commenced. The ordinary symptoms which prevailed through many months were headache, especially on the right side; constipated bowels; occasional sickness; a moist, furred, and pallid tongue; a slow pulse; and cold skin. The health otherwise did not seem to be much affected, till about six months before her death, when she had an unusually severe attack of headache, with sickness and occasional convulsive shriekings. From this she passed into a state of coma: the upper extremities becoming flexed and rigid, the lower ones paralysed. The facial muscles were drawn and fixed. The loss of sensibility was partial, and the comatose state continued for nearly two days; but from that time the speech became altered; her words were pronounced with difficulty and hesitation; the eyes were gaping, and the forced expression of face remained more or less to the time of her death. At different times she had similar though lighter attacks to the one described; and when the pain in her head was severe, there was generally increased vascular action. The temporal arteries could be seen raised and pulsating; the eyes would appear ferrety and injected; and the skin became hot and dry. A comatose state, more or less complete, always followed, and the movements of the body were awkwardly performed. Together with tremor, there was an uncertain gait. She seemed to have lost confidence in herself, and always supported herself by the different articles of furniture when moving across the room; and she had a tendency to move always to the right side. Her mental powers became enfeebled, and after an unusually severe pain in the head, she went into a comatose state, and died like one stricken with apoplexy.

AUTOPSY. On removing the scalp, the posterior portion situate about the centre of the lambdoidal suture was adherent, and some spots of dark blood oozed from the cut surfaces; the pericranium was thickened, and adherent to roughened bone. On removing the cranium there was firm attachment at that one point; and on examination, the inner table was found to be carious. The veins in the diploë were large, and could be traced to a good extent. The external table was thin, and yielded to the pressure of the point of a scalpel. The dura mater was of a dark colour, and had a central depressed ulcer in the part corresponding to the diseased portion of bone, but surrouding this there was firm adhesion to some hardened structure. The dura mater elsewhere had every appearance of normal character. The brain was small and very firm, and studded with numerous red dots and lines, with broader and lighter coloured streaks. There was a large flattened tumour of more than two inches in circumference, in shape like a mushroom, and of more than two inches in thickness, at the posterior part of the left hemisphere; the brain around was much injected; the ventricles contained each about an ounce of tinged serum, and there was an effusion of serum at the base. A section of the tumour placed under the microscope shewed much fibrous structure and very large caudate and fusiform nucleated corpuscles.

REMARKS. There are some interesting points in this history: first, the long continued anxiety, as an exciting cause; then the headache, but so isolated from other symptoms (the general health being unimpaired), as to lead to the conviction, for a time, that the disease was neuralgia; whilst it is in every way probable that it depended on an organic lesion in the brain. Dr. Winslow, in reviewing the symptoms attending alteration of structure of the brain, says: "In considering this subject, we are bound not to ignore the fact that the brain has great powers of accommodation, and is facile to the existence of a considerable degree of organic pressure, if equally diffused, and of structural lesion, provided it be restricted to the medullary matter, and has been of slow and progressive growth." The pain was fixed on the right side of the head, whilst the tumour was located in the left hemisphere. I account for this by a *contre-coup*—the right hemisphere being pressed against the cranium.* The sudden change in the movements of the body, and the altered speech, as if produced by some effusion or softening, were very remarkable; as were also the periodic attacks of coma, resulting, probably, from sudden congestion; whilst the firm and injected brain proved that its healthy structure had undergone a change.

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* I would refer the reader to the Clinical Remarks on Tumours within the Cranium, by Dr. Brown-Séquard, in the *Medical Times and Gazette* and *Medical Circular* for November 7th.

Case II. A woman, aged 46, addicted to drinking, had for a time been in a somewhat deranged state. She suddenly fell down insensible, and remained unconscious for several hours. She had incessant movements of the arms and legs, but was unable to speak or comprehend any question. When returning to consciousness, she complained of her head, and was unable to protrude her tongue. Her speech was defective; the pulse being slow and feeble. She improved through the following two days; there was some subsultus; she replied to questions slowly; and asked for food. The following day she went into a deep coma. The mouth was drawn to the left side; the right side was paralysed, the forearm being flexed and rigid. During the two following days, the hemiplegia was complete; the pulse was slow; the skin moist and cool; the breathing deep. On the following day the breathing became more hurried; the pulse quicker: skin warmer; face flushed; and within thirty hours she died.

Autopsy. On removing the skull, the dura mater was found to be exceedingly tense, but not injected. The surface of the brain was soft, and it was with difficulty that the membranes could be divided without injuring the substance of the brain. The subarachnoid vessels were injected, and an opaque film filled the sulci between the convolutions. There was a little serous exudation over the surface of the brain. The brain-substance was very soft, especially on the left side, portions of which adhered to the membranes, and were removed in patches. The white substance was too soft to be sliced with the brain-knife, and was of a cream colour. In some parts, the grey matter was reddened and injected. The ventricles contained a little serum.

Remarks. In this case, the abuse of stimulating drinks was the exciting cause, and the accession of disease appeared to be due to a sudden congestion. The grave symptoms were ushered in by insensibility, inflammation of the membranes rapidly ensuing, and producing involuntary muscular movements of both sides of the body. Undoubtedly, a change had been going on for a lengthened period, resulting in softening as well as hypertrophy of brain; but no proof of softening had existed; and it was only after a certain amelioration had taken place that another series of symptoms gave positive proof of softening; and it is to this change that I am disposed to attribute the hemiplegia, with partial tonic contraction of the right arm.

Case III. A man of sanguineous temperament, spare, but muscular, aged about 30, had always enjoyed robust health; his strength had been unlimited, and his application to business unbroken. Twelve months since, he became bound for a sum of money, which surety was forfeited, and in consequence his mind had been much disturbed. Sometimes he would be excited, at other times desponding. Since his loss, his efforts to regain his position had increased. He had laboured most assiduously, and frequently had fasted nine or ten hours at a time, devoting the ordinary leisure hours to business purposes. He said that for the last four months he had not known what it was to be free from headache for a whole day; his health, however, did not seem to be impaired during that period, and he was able to continue his labours till May 20th. He at that time complained of pain in the head, had frequent vomitings, and constipated bowels. Pulse 75, small; skin cool. He complained also of pain in his back and limbs. There was no change on the following day. No tenderness or fulness of the abdomen.

On the next day, his bowels were copiously moved by a croton oil pill; the pain in his head was thereby relieved; he had nausea, but no vomiting. He continued to improve through the two days following.

I saw him at 11 A.M. on May 24th. He said he was better; the pulse was 75; the skin cool; the bowels were costive; the urine was copious and straw coloured. At 12 o'clock, I received a hasty summons, and found him unconscious. The arms were flexed and rigid; the facial muscles were paralysed; there was muttering delirium; the skin was cold; the pulse 58, small; the breathing irregular. After the lapse of half an hour, the rigidity passed off, leaving him in the same unconscious state, occasionally picking the bedclothes and his hands. He could not comprehend or answer questions.

3½ P.M. He was conscious, but slow to appreciate, and uncertain in his replies, answering questions in monosyllables, positively or negatively, according as they were put to him. His tongue was moist and furred; the pupils were somewhat dilated, contracting slowly under the influence of light; the pulse was 56; the breathing irregular. There were great tossings and obstinate endeavours to please himself, and determination not to submit to the will of others.

At 6 P.M., he was more conscious; there was extreme restlessness; his skin was warmer; the pulse was feeble; he had some tendinous jerkings.

8 P.M. There was greater heat of skin; the pulse was small; but he was so restless, it could not be counted. He seemed to have fear when a candle was brought near him; the pupils acted slowly.

At 11 P.M., he became more tranquil, and seemed to be going into a state of coma. The breathing was regular and deep; pulse 70, more full; the skin was hot, and the face flushed. He remained conscious for a few minutes, and died about two the following morning.

Autopsy. On removing the membranes the pia mater was observed to be particularly dry. The veins lying between the convolutions were full. The white substance was covered with red dots and streaks, and was softer than ordinary. The septum was decidedly softened, and of pink colour. The ventricles each contained about an ounce and half of serum.

Remarks. Here again is another case where mental anxiety and care, together with undue bodily exertion, were the exciting causes. I was disposed at the onset to regard the symptoms as the commencement of a typhoid fever. A sudden congestion produced coma, and a class of symptoms afterwards arose which were, perhaps, due to the dry state of the pia mater. It is possible that this peculiar condition was the beginning of an inflammation, and that death occurred before there was time for secretion to take place, thus assimilating that state of inflamed pleura when the friction sound first becomes audible. The injected brain and softened septum showed that a subacute inflammation had existed.

Case IV. A spare man, about 30, managing clerk to a solicitor, married, with a family of five or six children, had always had good health, and had been a man of keen perception and good judgment. For two years past he had had much mental excitement, owing to an incomplete agreement for being admitted into partnership with the gentleman whose clerk he now was; and, though well-informed in legal matters, he began to have misgivings about his approaching examination. When not employed in office work he spent most of his time in reading law books, and was in the habit of sitting up till early morning hours. He was very abstemious, and regular in his habits. He first consulted me for indigestion, attended with sickness and headache, from the latter of which he had been a sufferer for some months. The pain in his head was increased by noise and excitement, and was always worse after he had had any important business to transact. He did not vomit often, but had nausea after taking food. His bowels were sluggish in action; the skin was cool; the face was pallid, with an anxious expression; and he had partial ptosis of the left eyelid, which was habitual to him. He had never had any fit or convulsion. His father, a spare man like himself, died of apoplexy when about his (the patient's) age. By my advice he discontinued business, but was subject to some annoyance by frequent messages from the office, and urgent requests to return to business as soon as possible. He became very irritable and eccentric; took his meals at irregular times, and his food consisted only of vegetables and cereals with milk. His wife told me that he had changed entirely in his disposition; from being a kind husband and indulgent father, he had become morose and strict even to cruelty. During a twelve months continuance of these irregularities he consulted various physicians and practitioners. I occasionally saw him, and he had always pain in the head to complain of. As he became worse and remained more at home, I was in more regular attendance upon him. His speech began to falter and thicken. There was a gradual falling of the right eyelid, so that his appearance resembled a man half intoxicated; and he often forgot the concluding half of the sentence he was uttering, but was unaware of this deficiency himself; and though he had not asked any question would anxiously look for a reply. After a longer and more severe continuance of pain, he had a strong epileptic convulsion. The excitement was so great, the eyes so turgid, the face so swollen and dusky, that I did not hesitate to bleed him at once. In about four hours he passed into a state of coma, all spasm and rigidity having abated; from this he slowly recovered, staring wildly round the room, semi-conscious, unable to articulate, and unable to guide his movements. From this condition he passed into a state of melancholy, and underwent a series of changes, varying from great excitement to calm meditative dejection; but the mean state was determined obstinacy. I placed him in an asylum, from which he was soon recalled, and he shortly afterwards had another convulsive seizure, and became partially paralysed.

His case being hopeless, the agreement for partnership was nullified. He could not be restrained by his friends, and he was placed in the Birmingham Borough Lunatic Asylum, where he died after becoming generally paralysed.

Mr. Green, surgeon to the institution, furnished me with the following short history of the illness prior to his death:—

"Re-admitted, Dec. 12th, 1857. Stated to be incoherent, calling himself a banker, at other times a tailor. Articulation not clear. Gives wrong answers and uses wrong words. Right pupil larger than left. Altogether in a very excited state. 15th. More collected to-day, and articulates better. Ptosis of left eyelid. He is unable properly to comprehend his position here, and forms a very wrong estimate of his own circumstances, pecuniary and otherwise. April 8th. Mind much more feeble; has a propensity to steal food; filches all within his reach. 26th. Very destructive; falling away rapidly. May 9th. Can't stand; swallows with difficulty. Died at eight o'clock on the 11th."

There was, unfortunately, no *post mortem* inspection allowed; but from examination of brains in similar affections there is generally found inflammatory softening of the cortical structure, and, frequently, adhesions of the brain-substance to the membranes, so that, on removal of the pia mater, patches of brain-substance are removed with it.

It is to be regretted that whilst so much has been done in the elucidation of the morbid changes found in the brain after death, so little has hitherto been done to draw attention to the importance of the early recognition of symptoms which such changes give rise to during life, or to the exact amount of deviation of functional performance which this or that lesion had occasioned. The association of the symptoms with the lesions, and the data relative to the amount of improvement of which the diseased brain is susceptible, remain as yet to be perfected by further experience.

What conclusions can be drawn from the consideration of the cases already cited? Why, that the symptoms are from time to time indicative of hyperæmia of the cerebral hemispheres—that by well directed treatment a great number of cases will recover—that a few die in the earlier stages from what has been described as congestive apoplexy—whilst many admit of some relief, but undergo such structural change as to have their lives extended over a period of years.

"It is a well established fact," says Dr. Winslow, "that seventy if not eighty per cent. of cases of insanity admit of easy and speedy cure if treated in the early stage, provided there be no strong constitutional predisposition to cerebral and mental affections, or existing cranial malformation." And in the report of the Hanwell County Lunatic Asylum for 1833, Sir William Ellis says: "It is a melancholy fact, that amongst 558 cases now in the house, there do not appear more than fifty who, under the most favourable point of view, can be considered curable. This is to be attributed almost entirely to the neglect of proper remedies in the early stages of the disease.... Diseased action is allowed to proceed unchecked until diseased organization has taken place, and the patient has become incurable."

The cases admitting of cure are marked by headache, more or less severe; with changes in the special senses, as ringing in the ears; alteration in vision; temporary embarrassment in speech; trembling in the limbs or face; injected eyes; and the slow pulse, but may be of variable force. Such are the ordinary symptoms of congestion. If these symptoms do not spontaneously cease, or are not subdued by treatment, but are allowed to acquire a sufficient intensity, they are succeeded by sudden loss of consciousness; the extremities generally being rigid, held, as it were, by tonic spasm, so that, truly, paralysis cannot be said to exist. After a time sensation returns, without leaving any lesion or trace of disease, otherwise than the functions of life are slow in being established, the speech being embarrassed, and the bodily movements performed with difficulty. Even so far then may we hope to extricate our patients from extreme danger, and restore them to perfect health. But when succeeding to the exaltation which first accompanies inflammatory action, change in the brain is effected, either by infusion into its cavities, or softening of its structure, the coma does not terminate without leaving some trace or sign of lesion. A condition approaching more closely to that of apoplexy may speedily destroy, or epileptic convulsions, only differing from epilepsy by the context of the symptons, may make death equally certain. Or with only a partial loss of consciousness, disordered involuntary movement, or permanent muscular contractions, or resemblances to mania, or degeneration into general paralysis and idiotcy, shall as surely herald the approaching termination in death.

I cannot do better than conclude this paper by quoting an extract from the valuable lectures of Mr. Hilton, *On the Influence of Rest in Disease.* "It is quite painful, but instructive, to see occasionally a total change in character in the men who overwork their brain. City merchants, bankers, accountants, who, in good health, are quite able for the worry of business and all conceivable complex accounts in bookkeeping; who know the varying phases of the money market to a decimal, yet will be reduced to such a state that the simplest sum in arithmetic gives them trouble; they will probably fall into a state allied to melancholy or imbecility, as they feel they are not as once they were. Their entire nervous system is unstrung, they want rest.... The cure for those men, if adopted in time, is in one word rest—that kind of rest where the delicate cells of the cerebral hemispheres have time to regain their health and activity. Let them have what muscular exercise they please, change of air or scene, but the larger portions of these brains must have rest."*

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, & DARTFORD DISTRICT MEETINGS.

ON SOME AFFECTIONS OF THE BREAST OCCURRING DURING LACTATION.

By Charles L. Allwork, Esq., Maidstone.

Read at Maidstone, October 26th, 1860.

It has occurred to me that on this occasion a few moments might not be unprofitably spent on the consideration of affections of the breast during lactation. In common with others it has been a matter of much concern to me to observe how frequently they are met with during this important epoch. No one can gainsay that much comfort is involved both to the mother and her offspring by the due performance of the lacteal functions; and I think it behoves us, as guardians of the public weal, to do all we can to promote the integrity of this organ, that the mother "may feel how tender 'tis to love the babe that milks her," besides having her health maintained; and also that the child may have the advantage of its own natural nourishment. When we think on the structure of the female breast (simple though it be), we cannot be surprised that at the time of sucking it should occasionally be the seat of inflammatory and suppurative action. Whatever leads to obstruction and engorgement of the lactiferous tubes will frequently give rise to irritation, inflammation, too often with the speedy formation of pus; but I venture to affirm, without fear of contradiction, that in nine cases out of ten these affections have their origin in some defect of the nipples, which are either excoriated, fissured, retracted, imperfectly developed, or altogether wanting. I think it the province of the accoucheur, on being engaged to attend a woman in her approaching confinement, to ascertain, by a personal examination, the condition of these organs; when the nipples are properly developed much advantage will be derived by washing them twice or three times daily with a lotion of oak bark and alum, and whenever she has the opportunity to expose them freely to the air; by these means we harden the nipple, and render it less sensible to the action of the child's mouth.

In the case of retracted nipples, the elastic bottle will be found necessary to draw them out; or if the nipple be imperfectly developed, to assist in manufacturing one. I believe, where the nipple is altogether wanting, it is not only useless, but positively injurious, to expose the patient to the risk of mammary abscess by attempting to nurse her child; in such a case it is far better to abandon the idea at once, and do away with the milk. For this object the breasts ought never to be drawn, as this proceeding only tends to keep up irritation. The better plan, I find, is to keep the gland covered with brown paper, on which is spread an ointment of lard and brandy, or with the belladonna ointment; and at the same time to give saline aperients, with diuretics or diaphoretics.

In cases of excoriated nipples, I have found a liniment of glycerine and tincture of catechu an excellent application. I must not, however, omit to mention that protecting the nipples by means of a shield during the time of nursing the infant, is an important adjuvant in the treatment, and also to keep the nipples protected after each operation with Wandsborough's metallic shields. In the aphthous form of excoriation, borax dissolved in rose-water is the best application. Sometimes, after acute inflammation of the breast has subsided, we find the gland in the following condition, namely, hard, but without pain or tenderness, from the effusion of fibrine. Either the unguent. hydrarg. fortior with belladonna, or a moderate degree of pressure, will effect its removal: but not at all times entirely, as we frequently find after inflammatien of the breast that the portion of the gland most involved is not restored to its normal condition, nor capable of performing its proper function.

When pus is formed, be it ever so deeply seated, it is important that it should be evacuated early, that it may not burrow. The breast should be covered with a linseed meal poultice, and well supported by means of a handkerchief passed under it and over the shoulder, and as soon as the discharge becomes serous, the breast should be strapped with soap plaister. I fear, in many cases of imperfectly developed, or obliterated nipples, they are to be traced to the abominable practice of tight-lacing during maidenhood, and, as we frequently stand *in loco parentis*, we could not confer a greater benefit on society than to urge on the rising generation the imperative necessity of abandoning this practice. The breast is not only frequently the seat of inflammatory and suppurative action, but I regret to record that it may also occasionally be the seat of sphacelus, as the following case testifies:—

Case. On November 25th, 1859, Mrs. P., aged 21, a delicate young woman, living in lodgings in a single ill ventilated room, was confined of her first child, from which she appeared to make a good recovery. She was, however, the subject of badly developed nipples. Three weeks afterwards, the left breast became inflamed, for which anodyne fomentations were used; and, as there was much febrile disturbance, with constipated bowels, saline aperients were administered; belladonna was also applied externally. Notwithstanding these measures, suppurative action appeared inevitable, and accordingly linseed-meal poultices were had recourse to. It was now thought that matter could be felt deeply seated; and an opening was accordingly made, which bled freely, but there was no appearance of pus. She, however, expressed that much relief had been afforded her by the operation. Soon after this, and somewhat suddenly, the breast assumed a dark appearance; to the touch, it was crepitant. Free incisions were made, and support given in the shape of wine, beef-tea, and a mixture of bark, ammonia, and opium, every three hours, with a full dose of opium at night. Only the wine, however, could be borne on the stomach; and this being the case, citrate of ammonia, with full doses of Battley's liquor cinchonæ, were substituted, and given in an effervescing state. This was likewise rejected. Quinine and opium in pills were then tried, which were retained. Linseed-meal poultices, mixed with brandy, were kept applied to the breast; and in a few days the slough separated, leaving a deep chasm in the breast, and exposing the pectoral muscle. The granulations, however, looked healthy; and for some days hopes were entertained of her recovery. She, however, became suddenly worse, and died on January 11th of this year.

The remarks I have made on the origin and treatment of affections of the breast during lactation, I am aware, contain nothing new. I have brought the subject before the meeting with the hope it may lead to a free discussion on a very common, but nevertheless a very important question; and I hope to glean from the members present, gentlemen of great experience, information that may lead me to treat these affections in a better way than from the knowledge I now possess.

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* A series of very interesting cases, illustrating "Diseases produced by Mental Influence," by Dr. J. Russell, will be found in the British Medical Journal for 1860, Nos. 201 and 202.

Reviews and Notices.

Clinical Lectures. By R. B. Todd, M.D., F.R.S. Second edition, edited by Lionel Beale, M.B., F.R.S. Pp. 912. London.

The contents of this volume are well known to the profession, and have already excited the criticisms of the medical press. They consist of the Lectures, which appeared successively in the years 1854, 1857, and 1859, and are now republished under the superintendence of Dr. Beale, being collected into one large volume. Dr. Beale has undertaken the duty "at the request of the executors of his late friend and former teacher". He has made as little alteration in the arrangement of the matter, he tells us, as was consistent with its collection into one volume.

It would be quite superfluous, at this time of day, to pass any opinion upon the doctrines enjoined and the practice followed by Dr. Todd. Probably all our readers are well acquainted with both these points, and have already made up their minds either in agreeing or disagreeing with the views of that physician. We think it, however, only fair to say this much, that we do not consider Dr. Todd's opinions have, in all cases, been fairly dealt with by those who have taken an unfavourable view of his method of treating diseases. We cannot help noticing that he is occasionally made by his critics to go much greater lengths in the stimulating treatment of acute diseases than, as it seems to us, his writings warrant us in concluding that he really did go. We certainly do not find anywhere in his works that fiery, uncompromising, and universal use of brandy in all diseases, and in all stages of all diseases, which has been ascribed to Dr. Todd. Probably the treatment adopted by some of the late Doctor's severest critics differs only in degree, if at all, from that which is here laid down in the volume before us; and it is somewhat curious to note how the stimulating treatment of fevers and adynamic diseases is spreading beyond our own country, and even amongst the countrymen of Broussais. The opinions of many of the leading practitioners of the day at Paris are becoming very much the opinions of practitioners in this country on these points, and so far confirm the general views of treatment enunciated by Dr. Todd. We say enunciated by Dr. Todd; for the truth is, there was no invention or adoption by Dr. Todd of any novel line of treatment amongst us; only this, Dr. Todd had the courage to state openly, and in distinct terms, what his practice was. Dr. Todd was assuredly not the first person who learnt and taught that diseased processes are signs of enfeebled vitality; and that in one sense, indeed, all diseases are to be classed as adynamic. To our modern pathology, and modern physiology, and modern clinical medicine, we may fairly ascribe this lesson. Dr. Todd, as a physician in extensive practice, was undoubtedly one of the most advanced in the knowledge of scientific medicine; and the practical application of his principles on so large a scale doubtless brought his name prominently before the profession as a giver of stimuli in disease.

We shall not stop here to ask whether he carried this general practice of his day further than was well for his patients. He certainly carried it no further than he thought was beneficial for them. And if, in our judgment, less stimulation and more depletion than Dr. Todd practised form a better basis of treatment of disease, we can only state that it is so in our opinion. The day for vehement assertions respecting the treatment of diseases is, we hope, fast passing away. The great opposition and diversity of opinions held by equally talented observers respecting the treatment of the same disease, should teach us a great lesson of modesty in criticising the practice of our neighbours. "I have", says an old French practitioner, "observed typhoid fevers during thirty years; I have seen all kinds of treatment adopted for their cure, from the most patient expectant method of old practitioners up to the most *turbulent* medication of young doctors; antiphlogistics, excitants, tonics, and antispasmodics, timid venesections, venesections *coup sur coup*, repeated evacuants, enormous sweatings, icy applications, etc. And all these opinions, and all these different or opposing methods of treatment, I have found supported by serious and intelligent practitioners, men worthy of confidence; and they have all given me the same answer, 'I am well satisfied with my treatment.'" We recommend this good sense of the old practitioner to the consideration of those who are disposed to criticise severely the practice of men, who treat diseases differently from what they consider the true and orthodox fashion of dealing with them.

The Science and Art of Surgery. Being a Treatise on Surgical Injuries, Diseases, and Operations. By John E. Erichsen, Professor of Surgery and of Clinical Surgery in University College, and Surgeon to University College Hospital. Third Edition; enlarged and carefully revised. Illustrated by four hundred and fifty Engravings on Wood. Pp. 1167. London: Walton and Maberly. 1861.

This new edition of Mr. Erichsen's standard work has undergone most careful revision on the part of the author, who has not only added to it from the rich stores of his own experience, but has incorporated such of the observations of other surgeons as were best fitted to render the book a complete treatise of the present state of the Science and Art of Surgery. The additions thus made have increased the work to above one hundred and twenty pages beyond the size of its predecessor. Much of the new matter appears in the form of what may be termed interstitial deposit among that which already existed—indeed, there seems to be scarcely a page where this has not taken place; but we also meet with a full consideration of several subjects which were either omitted or but very briefly noticed in the former editions.

In turning over the pages, we observe that Mr. Erichsen has, in the chapters on Amputation and on Gunshot Wounds, availed himself of the information collected by Dr. Macleod, and published in his valuable treatise on the *Surgery of the Crimean War*.

In a Chapter on the Arrest of Arterial Hæmorrhage, Mr. Erichsen introduces Dr. Simpson's account of the application of Acupressure, and expresses on this proceeding the opinion that—

"Of the value of this method of arresting hæmorrhage in the case of small arteries, there can be little doubt. It has long been familiarly employed in restraining the hæmorrhage from the coronary artery of the lip after operations for hare-lip; and in vessels such as this, the branches of the temporal, the digitals, etc., it is unquestionably a safe as well as a convenient and easy method of suppressing bleeding. But for arteries of large size, as the femoral, it yet remains to be shown that Acupressure can be depended upon as a mode of restraining hæmorrhage equally safe with the ligature."

Mr. Erichsen is a strong advocate of the early use of the Starched Bandage in fractures. When this mode of treatment was first introduced, he did not think it safe to have recourse to it until the sixth, eighth, or tenth day, when the swelling of the limb had begun to subside. For some years, however, he has, in some hundreds of cases of fractures of all kinds, followed Sentin's plan of putting up the limb in the starched apparatus immediately after the occurrence of the injury; and he says that, the more experience he has of this plan, the more reason has he to be satisfied with the results. In cases of fractured thigh, for instance, "patients have frequently been cured without any shortening whatever, with the preservation of the natural curve of the limb, and without confinement to bed after the first week." In compound fractures of the leg and thigh, he has succeeded in producing union of the wound, and converting the compound into a simple fracture, more frequently by putting up the limb in the starched apparatus than in any other.

In speaking of Injuries of the Head, Mr. Erichsen describes, besides concussion and compression, a morbid condition, to which he gives the name of *cerebral irritation*, in which the patient does not present the symptoms of either of the above-named states, nor any combination of their phenomena. It generally follows blows upon the temple or forehead; and is probably, in many cases, connected with laceration of the cerebral substance. The symptoms are thus described:—

"The *bodily symptoms* are as follow: The attitude of the patient is peculiar and most characteristic; he lies on the side, and is curled up in a state of general flexion. The body is bent forwards, the knees are drawn up on the abdomen, the legs bent, the arms flexed, and the hands drawn in. He does not lie motionless, but is restless, and often, when irritated, tosses himself about. But, however restless he may be, he never stretches himself out or assumes the supine position, but invariably reverts to the attitude of flexion. The eyelids are firmly closed, and he resists violently every effort made to open them; if this be effected, the pupils will be found to be contracted. The surface is pale and cool, or even cold. There is no heat of head. The pulse is small, feeble and slow, seldom above 70. The sphincters are not usually affected, and the patient will pass urine when the bladder requires to be emptied; there may, however, though rarely, be retention.

"The *mental state* is equally peculiar. Irritability of mind is the prevailing characteristic. The patient is unconscious, takes no heed of what passes, unless called to in a loud tone of voice, when he shows signs of irritability of temper, or frowns, turns away hastily, mutters indistinctly, and grinds his teeth. It appears as if the temper, as much as or more than the intellect, were affected in this condition. He sleeps without stertor.

"The course taken by these symptoms is as follows. After a period varying from one week to three, the pulse improves in tone, the temperature of the body increases, the tendency to flexion subsides, and the patient lies stretched out. The mental state also changes. Irritability gives way to fatuity; there is less manifestation of temper, but more weakness of mind. Recovery is slow, but, though delayed, may at length be perfect; although in these, as in all other cases of cerebral disturbance, ulterior consequences may be manifested." (P. 299).

In the chapter on Aneurism, he speaks on the whole favourably of compression by apparatus; which, he says, "may be employed in cases where it would not be safe to have recourse to the use of the ligature"; and is to be preferred to the ligature, as being not more tedious and infinitely safer in all ordinary cases of femoral and popliteal aneurism. He properly adds the caution, that "its success depends very greatly on the continuous care bestowed on the patient during the progress of the treatment." Of the methods of treatment by forcible flexion and digital compression, he has also a favourable opinion. The flexion plan, the credit of first successfully employing which he accords to Mr. Ernest Hart, "is most likely to be attended by success in those cases in which the aneurism is small, situated low in the popliteal space, and in a young or middle-aged subject, who can bear the continued flexion without much inconvenience." Like every other plan of treating aneurism, it occasionally fails. The digital compression plan, first employed by Vanzetti of Padua, "might be very advantageously combined with the treatment by flexion; but its great advantage seems to be, that it is applicable to arteries at the root of the neck, to which it would not be possible to apply any kind of compressing apparatus, or when the surgeon is placed in such situations as not to be able to obtain such an apparatus." In our last number, we gave an abstract of a case of inguinal aneurism successfully treated on this plan by an American surgeon. In speaking of the treatment by manipulation proposed by Mr. Fergusson, Mr. Erichsen is more cautious in giving an opinion. He says that its employment has been too limited to enable an estimate of its value to be formed; and that it can scarcely be considered (nor is it intended to be) of very general application. It may possibly, however, be advantageously applied to aneurism at the root of the neck and similar situations difficult of access for operation; but the danger of rupture of the sac, or of diffusion of the aneurism, must be borne in mind.

The chapters on Special Aneurisms have been increased by the addition of sections on Intrathoracic, Intracranial, and Intraorbital Aneurisms. Regarding the Intrathoracic or aortic aneurism, the author speaks only as to the physical and rational signs and diagnosis; operative surgical treatment is, of course, out of the question.

He attaches more importance to the rational signs—namely, pressure effects (pain, dyspnœa, dysphagia, and œdema), pulsation, and tumour—than to the auscultatory signs, the value of which, he says,

"In the diagnosis of aneurisms within the chest, is, perhaps, not so great as in many other thoracic diseases, in the early stages of the affection, and in those cases in which the aneurism continues small and sacculated throughout, or is so deeply seated as not to approach the parietes of the chest. . . . . . When, in addition to this, it is borne in mind that aneurisms of the arch often prove fatal by bursting into contiguous cavities and canals before they have attained a greater size than a walnut or a pigeon's egg, and thus are incapable of furnishing a murmur of any very marked kind, it can be easily understood that the value of auscultation is but small in many cases of thoracic aneurism." (P. 563.)

In an interesting section on Intracranial aneurism, Mr. Erichsen has derived his statistical information on the subject from an elaborate paper published in *Guy's Hospital Reports* by Dr. Gull. The causes of intracranial aneurism, Mr. Erichsen observes, are very obscure. The frequency of the occurrence of spontaneous aneurism in the arteries within the skull

> "Can only be accounted for by the thinness of their coats, and the want of an external cellular sheath rendering them unable to support the increased pressure from within, to which they are occasionally subjected in consequence of the alteration in pressure of the cerebral circulation at different periods; the result of some variation in the relative quantities of the different fluids within the cranium, or of determination of blood to the brain. This would more particularly be the case if their natural elasticity had already been impaired by the occurrence of atheromatous or other degeneration of their coats. As these changes are the natural consequences of advance in age, we find the tendency to the occurrence of this disease increase with advancing years." (P. 583.)

The intracranial aneurism is almost always formed by the uniform dilatation of all the coats of the artery. Of the sacculated form, Mr. Erichsen is not acquainted with an instance; and he believes that it would be less likely to occur than rupture of the vessels. It is somewhat remarkable, that the other vessels of the brain than that affected are very commonly healthy in cases of intracranial aneurism.

The symptoms of intracranial aneurism are very equivocal; and, Mr. Erichsen says, aneurism of large size may exist at the base of the brain without causing any symptoms whatever. The only symptoms that are of constant occurrence when the disease proves fatal, are those of hemiplegia and apoplexy. These may come on suddenly; or they may be preceded by a train of phenomena indicative of chronic disease within the cranial cavity. The most constant symptom is pain, which varies greatly both in extent and in character. The sight and hearing are often impaired; there may be paralysis in various degrees; the mental condition may be affected; and the gastric functions are often impaired. Very often, however, there are no premonitory symptoms; but the patient is suddenly seized, when apparently in good health, with rapidly fatal apoplexy.

> "In some cases the presence of aneurism has been detected by a loud rough or 'whizzing' noise being heard on the application of a stethoscope over one side of the head, and, perhaps, being audible to the patient. This sign, however, exists but in few cases; but when it does occur, it is unquestionably the most pathognomic of all. I am not aware that it has been met with in any form of cerebral disease except intracranial aneurism. With the exception of the whizzing noise, no special signs are afforded by aneurisms within the skull, which will enable us to distinguish between the symptoms occasioned by their presence and those of other tumours of the brain, and of organic cerebral disease." (P. 556.)

In the treatment there is usually little to be done: but, if the nature of the case be rendered obvious by the loud rough whiz being heard over one side of the head, or by the application of the stethoscope to the mastoid process, the carotid artery on the affected side may be tied. This was done in a "most interesting and instructive case" reported by Mr. COE, of Bristol, in the ASSOCIATION MEDICAL JOURNAL for November 30, 1855.

The chapter on Nævus has been enriched by the addition of some valuable observations on the treatment of this affection in various special situations; and on the *nævoid lipoma*,—a form of disease with which Mr. Erichsen has occasionally met, but which does not appear to have attracted much notice, although M. Nélaton speaks of it.

> "It is a tumour in which the nævoid structure is conjoined with or deposited in a cellulo-fatty mass. This disease is invariably seated upon the nates, back, or thigh. It occurs as a smooth, doughy, indolent tumour, incompressible, not varying in size or shape, without heat, thrill, or pulsation of any kind, possibly having a few veins ramifying over its surface, but no distinct vascular appearance. It is usually congenital, or has been noticed in early childhood; and continues without any very material change in shape, size, or appearance, until the inconvenience or deformity occasioned by it requires its removal. This is best effected by the knife. After removal, the tumour will be found to be composed of a cellulo-adipose basis, having a large number of veins ramifying through it, so as to constitute a distinct vascular element, communicating with small cysts containing a bloody fluid. The situation in which I have seen such tumours occur, where they gave rise to most inconvenience, and where their removal has required the greatest care, has been the anterior part of the thigh, just below Poupart's ligament, close upon and almost in connexion with the femoral vessels." (P. 634.)

In the chapter on Disease of the Hip-joint, Mr. Erichsen has incorporated much of the instructive clinical lecture on this subject published by him, last year, in this JOURNAL; and, *en passant*, we observe that he has acted similarly with regard to his lectures on Nævus, Sacroiliac Disease, Stricture of the Œsophagus, etc., which have appeared in this and other periodicals.

The section on Stricture of the Œsophagus is concluded by a notice of the operation of Gastrostomy, or opening the stomach, first proposed by M. Sédillot, anp practised by him, Fenger, Cooper Forster, and others. Of the operation, Mr. Erichsen observes:

> "The value of this operation has as yet to be determined by experience. In no case in which it has as yet been done has it as yet succeeded in adding much, if anything, to the prolongation of life. In reasoning upon it, two objections present themselves. First, there is the great and immediate danger of destroying life outright by the induction of peritonitis; though it is by no means impossible that the tendency to abdominal inflammation may be lessened by the previous starvation of the patient. But supposing this risk to be overcome, what is gained by the artificial opening? It is true that through it the patient might be nourished; but as every idiopathic stricture of the œsophagus is either from the first of a cancerous character, or eventually assumes a malignant action, of what advantage is it to endeavour to prolong a precarious existence, which must in a few weeks or months be cut short by the unchecked progress of a malignant disease? Would not the immediate danger of the operation much more than counteract all good to be eventually derived from it?
>
> "There is, however, one class of œsophageal strictures which are of the most obstinate character, and rapidly fatal by simple occlusion of the tube, without any tendency to malignancy. These are the constrictions that result from the swallowing of corrosive liquids, whether acid or alkaline. In such cases as these, in which speedy death by starvation is inevitable, I think that the

operation of Gastrotomy might with propriety be had recourse to." (Pp. 816-17.)

There are several other subjects in the book, regarding which we should have liked to give our readers an analysis of Mr. Erichsen's opinions; but we are warned that we have occupied at least as much space as can be allotted to us. The *σχολαστικος* in Hierocles carried about some of the stones of which his house was built as specimens of the edifice. We have done the like, but, we trust, with a much more satisfactory result than was arrived at by the owner of the house. In commencing this notice, we alluded to the revision which the book had undergone at the hands of its author; and this revision has, we will add in conclusion, resulted in the issuing of a work which more than maintains the position it had already earned—that of being an honour to the school of British Surgery, and to the memories of Samuel Cooper and Robert Liston, from whose teachings the author derived that knowledge which he has so well applied and improved.

British Medical Journal.

SATURDAY, JANUARY 12TH, 1861.

CELLULAR PATHOLOGY: ITS PRESENT POSITION.*

It is now some years since Professor Virchow has endeavoured, by the application of the views originally brought forward by Professor Goodsir of Edinburgh, to overthrow the doctrines put forth by Schleiden and Schwann as to the cell-theory. It is true, we nowhere find it stated that he is in any way indebted to Mr. Goodsir; and throughout Germany, as well as in other countries, it is supposed that, whatever merit may belong to these views, their originality is not to be questioned. The English translation of the work now before us is, however, dedicated to the Edinburgh Professor—a circumstance which indicates a recognition of some sort as to his connexion with Virchow's peculiar views of cellular pathology. What that connexion is, will be made apparent by the following passages:—

> "From this it follows not only that the entire organism, as has been stated by the authors of the cellular theory, consists of simple or developed cells, each having a peculiar independent vitality; but that there is, in addition, a division of the whole into departments, each containing a certain number of simple or developed cells, all of which hold certain relations to one central or capital cell, around which they are grouped. It would appear that from this central all the other cells of its departments derive their origin. It is the mother of all those within *its own territory*." (Goodsir's *Anatomical and Pathological Observations*, Edin., 1845, p. 2.)

> "Hence it follows that the structural composition of a body of considerable size, a so-called individual, always represents a kind of social arrangement of parts, an arrangement of a social kind, in which a number of individual existences are mutually dependent, but in such a way that every element has its own special action; and, even though it derive its stimulus to activity from other parts, yet alone effects the actual performance of its duties. I have therefore considered it necessary, and I believe you will derive benefit from the conception, to portion out the body into *cell-territories*." (Virchow's *Cellular Pathology*, by Chance, London, 1860, p. 14.)

There can be no question, therefore, that all that belongs to territories around cells, and to brood-cells, which form so important a feature in the theories of Professor Virchow, originated with Mr. Goodsir. In the same manner that the author has derived his leading views as to cells from one Edinburgh Professor, so he has borrowed, and equally without acknowledgment, his notions concerning leukæmia from another; viz., Professor Bennett. His theory also as to fibrine and softened clots is for the most part obtained from the observations of Zimmerman and Gulliver; and his views as to the diffusion of cancer are taken from Professor Van der Kolk. Indeed, throughout the book will be found a general appropriation of the ideas of other pathologists, almost in every case presented entirely as his own, and the whole worked up in founding a doctrine the nature and correctness of which we shall now proceed to consider.

According to Schleiden and Schwann, all development originates from a formative fluid or substance (*blastema*) by the deposition of molecules and granules, one of which either enlarges, or several of which unite together to form a nucleus (*cytoblast*). Around this a membrane is precipitated, to constitute a nucleated cell; the whole consisting of—1, nucleus often containing nucleoli; 2, cell-wall; and 3, contents, or the matter between the nucleus and cell-wall. Cells so formed might multiply themselves in various ways. This doctrine, which is consistent with the vast mass of observations since made by histologists, and applicable alike to physiological and pathological processes, is declared by Virchow to be "a theory of development which has now been almost entirely abandoned, and in support of the correctness of which not one single fact can with certainty be adduced" (p. 10). He maintains, on the contrary, that "where a cell arises, there a cell must have previously existed (*omnis cellula e cellulâ*), just as an animal can spring only from an animal, a plant only from a plant. In this manner, although there are still a few spots in the body where absolute demonstration has not yet been afforded, the principle is nevertheless established, that in the whole series of living things, whether they be entire plants or animal organisms, or essential constituents of the same, an eternal law of *continuous development* prevails. There is no discontinuity of development of such a kind that a new generation can of itself give rise to a new series of developmental forms. No developed tissues can be traced back either to any large or small simple element, unless it be unto a cell." (Pp. 27-28.) He therefore divides all the tissues into three classes—1. Those consisting exclusively of cells, cell lying close to cell; 2. Those where cells are separated, yet connected together by intermediate matter (intercellular substance), comprising the tissues which are now-a-days generally comprehended under the name of connective tissues; 3. Those in which the cells have attained specific higher forms of development, so as to be peculiarly animal, as in the nervous and muscular systems, the vessels, and the blood. (Pp. 28-29.)

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* Cellular Pathology, as based upon Physiological and Pathological Histology. By Rudolph Virchow, Professor of Pathological Anatomy, etc., in the University of Berlin. Translated by Frank Chance, B.A., M.B.Cantab., etc. 8vo. London: 1860.

Such are the chief fundamental propositions upon which Professor Virchow proceeds to erect other theories. The passages we have quoted give an idea of his dogmatic style, in which no doubt as to the correctness of his own observations and opinions is permitted for a moment to enter; in which the cell-doctrine of previous distinguished inquirers is stated to be abandoned and unsupported by a single fact; and in which the particular theory he favours, although admitted not absolutely to be demonstrated, is said to have its principle nevertheless established. Notwithstanding these assertions, he does not appear to us to have established any principle whatever. Every one of his propositions is not only doubtful, but opposed to the most obvious facts; while the whole doctrine he seeks to develope is made up only of confident plausibilities, utterly irreconcileable with that cautious and exact spirit of research so necessary for establishing any just and true theory. In proof of this, let us examine his propositions more particularly.

Is it then true that every cell arises from a cell, and that no developed tissues can be traced back either to any large or small simple elements unless it be unto a cell? The demonstration or refutation of this proposition, in truth, comprehends the whole view of what Virchow means by cellular pathology. Mr. Goodsir was too cautious to pretend that every morbid cell-product could be shown to originate from preexisting cells; but this is what is attempted by our author, but with what success we shall see. In the first place, let us determine what occurs in the ovum. If it be true that every animal originates from an animal, and every plant from a plant, it is not true that every cell originates from a cell in those organisms. The first change observable in an ovum after impregnation is a division of the yolk, which consists of a granular amorphous mass; and after a greater or less number of divisions, varying in different animals, the germinal membrane or formative material is produced out of cells originating from that mass. Recent researches have shown that the spermatozoid or male element enters the yolk; and that it, together with the germinal vesicle or female element, is dissolved; thus communicating to the granules of the yolk formative properties, but not causing the cells subsequently developed to descend from the germinal vesicle directly or continuously. Here, then, it has been shown histologically that cell is not formed from cell, but from elements altogether distinct from it. It is true, Virchow wishes to get rid of this troublesome fact by stating that "the conviction has been gradually acquired that the matter in question" (that of the yolk) "is a cellular substance; and if what has been most rigidly maintained by Remak is correct, namely, that the change of the yolk also is due to a visible division of cells, to the growing in of membranous partitions into the interior of the ovum, and their coalescence, we have not here to deal with a free organising impulse taking place within the yolk, but with progressive acts of division on the part of the originally single cell." (P. 399.) But this notion is not only opposed to the careful investigations of Bischoff, but to those of every other embryologist.

Again, when we examine any of the tissues of the embryo, we invariably observe nuclei and cells in all stages of development included in a finely molecular substance. Cells that are formed are frequently seen to be multiplying endogenously or within cells; but this only points out how such cells multiply after they have been formed, and not how they originate in the first instance. To determine this point, we must have recourse to examples in which we are satisfied that there is a process of new cell-formation which cannot be confounded with the surrounding textures. With these we are admirably furnished in morbid growths. If we examine the healthy skin or lungs, we find no pus or cancer cells. According to Virchow's theory, these must descend from preexisting cells; and, to establish this, he has recourse to an elaborate series of assumptions, some of which we shall endeavour to expose.

In the first place, as is well known, pus and cancer cells have been found in all the tissues of the body, in brain, lungs, liver, bones, fibrous tissue, etc. It cannot, therefore, be maintained that these morbid cells can descend from the cells of any particular tissue by a law of continuity. To meet this difficulty, a convenient theory of what is called *histological substitution* is invented, in the following terms:—

> "In the place of the law of continuity, therefore, *we must necessarily put something else.* And here I think the doctrine which has the strongest claims to our attention is that of *histological substitution.* In the case of all tissues of a like nature, it is quite possible, even whilst confining our attention to what occurs physiologically in the various classes of animals, to find one tissue at a certain fixed point of the body replaced by an analogous one belonging to the same group, or, in other words, by an *histological equivalent.*" (P. 70.)

We call this a most convenient doctrine, because the obvious failures in the primary hypothesis may be easily explained by mixing together all sorts of tissues, saying they belong to one group, and calling them histological equivalents. Of this plan Professor Virchow has largely availed himself, and thereby found it necessary to produce another theory, which is perhaps the most inconsistent and unphilosophical in the book—viz., the connective tissue theory. This theory we shall examine in our next number.

THE WEEK.

We have this week to announce the appearance of a very important work—the first volume of *A System of Surgery*, edited by Mr. Holmes. This volume contains articles on general pathology by the following gentlemen:—Inflammation, by Mr. Simon; Abscess, by Mr. Coote; Sinus and Fistula, by Mr. Paget; Gangrene, by Mr. Coote; Ulceration and Ulcers, by Mr. Paget; Erysipelas and the Allied Diseases, by Mr. Campbell De Morgan; Pyæmia, by Mr. Callender; Tetanus, by Mr. A. Poland; Delirium Tremens, by Dr. A. W. Barclay; Scrofula, by Mr. Savory; Hysteria, by Mr. Savory; Syphilis, by Mr. Henry Lee; Tumours (Innocent), by Mr. Paget; Cancer, by Mr. C. H. Moore; Contusions and Wounds, by Mr. Paget; Animal Poisons, by Mr. Poland; Hæmorrhage and Injuries of the Vessels, by Mr. Moore; Collapse, by Mr. Savory; Burns and Scalds, by Mr. Holmes; the General Pathology of Fractures, by T. K. Hornidge; the General Pathology of Dislocations, by Mr. Holmes. The names of the authors of these articles will ensure for the *System of Surgery* the earnest attention of the profession; and we most sincerely hope that the editor may satisfactorily complete the arduous task which he has undertaken, viz., of bringing before the profession an exposition of English surgery. The second volume, we are told, is in the press.

"When finished, if it succeeds in its object, this work", says the editor, "will present a complete and impartial view of British surgery, free from the bias of any school, or the prejudices of any individual; while, the special attention of the authors having been drawn to their several subjects, any advance which the rapid improvement of surgical knowledge may introduce into them will be registered and kept in readiness for future editions. Illustrations will not form a prominent feature in the work; but they will be provided where they are absolutely necessary for the full understanding of any subject. Where subjects are treated of which are common to surgery and medicine, the assistance of physicians who have paid peculiar attention to those subjects has been gladly accepted."

We shall take occasion to bring the contents of the volume now published under the notice of our readers.

A successful case of Cæsarean section has been performed by Mr. J. Edmunds of Spital Square. We may indeed call it successful, for both child as well as mother were thereby saved. Awkwardly enough for the operator, the placenta was so placed that it was necessarily cut through in the operation; and the decision and rapidity of this part of the proceeding saved the woman's life. She must have died from hæmorrhage, had there been any hesitation at this moment. This fact is thereby established; viz., "that the placenta may be cut through, and dragged out first, without losing either mother or child; and also that it is unnecessary to endanger the arteries on either side of the uterus in order to avoid the placenta." The adherent membranes were pushed back into the uterus. Up to the fourteenth day, no membranes had been discharged *per vaginam.* The lochia appeared on the ninth day; the breasts filled on the fourth. No drugs were given, except an anodyne; no mercury, and no brandy. She took simple and varied nourishment, with fruit. "I thought", says the operator, "these great incisions more likely to be healed by Nature in her own way, than by Nature under the influence of either mercury or brandy. The peritonitis, though severe, was simply treated." Full details of this interesting case will be found in the last week's number of the *Medical Times.* This successful case may probably bring forward a discussion again upon the relative merits of embryotomy and the Cæsarean section in certain cases. Sure enough it is, that operations on the abdomen—ovariotomy—which were in Dr. Bright's early days looked upon as proceedings not to be thought of, are, under an improved method of surgery, become of daily occurrence, and successful far beyond what has been anticipated of them.

Kuchenmeister, the great authority in matters *helminthiques*, has attempted to show, and perhaps has shown, that in the human intestines cysticercus cellulosæ is metamorphosed into tænia solium. He took two criminals condemned to death for the subjects of his experiments; and introduced into their food a large number of cysticerci. In one case, after death four young tæniæ were found in the duodenum, and six others in the intestines below. In another case, the cysticerci were swallowed (under the immediate supervision of Dr. Liebenhaar, Kuchenmeister's partner in the experiment) November 24th, 1859, and January 18th, 1860, and the subject decapitated on the 31st March. Half of the cysticerci swallowed, were, it was found, converted into flat worms, and eleven of these possessed segments which had arrived at maturity. This last case seems almost demonstrative of the fact asserted by Kuchenmeister. The philosopher has been reproached for his experiment thus performed *in corpore vili* of humanity; but he defends himself by the reasoning that, if the criminals had been pardoned, they might have been readily cured of the worms. This modern method of experiment seems, in its small way, to be somewhat approaching the ancient way of thinking of the Rationalists, as enunciated by Celsus. They too, thought we might very fairly make use of criminals for the purposes of getting knowledge *in re medicâ*. Some of our readers may have read during the past year certain rather go-a-head proceedings in this way done by our Yankee medical brethren, and recorded in Dr. Brown-Séquard's Journal. These gentlemen calmly investigated the movements of a palpitating human heart rapidly ripped from the chest of a criminal, who after execution was cut down with a pulse still beating—we suppose we may say while still alive—for the satisfaction, it would appear, of the curiosity of the doctors. Wordsworth had this class of man in his thought:

> " Physician art thou, thing of eyes,
> Philosopher, a prying knave,
> A man who'd peep and botanise
> Upon his mother's grave."

In the annual report lately presented to the meeting of governors of the Queen's Hospital, Birmingham, we find it stated: " That the medical officers have recommended the appointment of a dental surgeon, and it is worthy of consideration how far it may be desirable to appoint an ophthalmic surgeon." The report then goes on to refer to the protest lately put forth against special hospitals by a large body of the leading members of the profession in London and the country; and recapitulates for the benefit of the governors of the hospital the reasons why special hospitals are in so many instances injurious to the interests of the patients, the public at large, and the pockets of the benevolent. We shall take an early opportunity of referring more fully to this important topic; but we trust in the meantime that the governors of the Birmingham Hospital will carry out the recommendation of the report. Whether for good or for ill, the business of our profession is now so divided amongst the labourers who cultivate it in general practice, that it has become necessary to establish divisions of labour to an equal extent in our medical charities and schools. And, as we have said, all parties interested gain by this process of concentrating varieties together under one general supervision. The benevolent gain greatly; for, instead of being mulcted for the sustenance of half a score of separate and minor promulgators of medical blessings, they concentrate their cheaper benevolence on one grand establishment. The science of medicine, also, is no slight gainer; for this union of forces affords a large field in which the student may satisfactorily exercise his intelligence, and where he may gain intimate knowledge in all departments of his business—a thing impossible to him, if he has to make the circuit of a large city in order to accomplish his student's journey through all the diseases of the human frame. And, besides this, the cramping and fettering of intelligence, which exclusive attention to a speciality naturally tends to engender in the individual specialist, are counteracted by communion with his non-specialist brethren, or with his brethren-specialists in other fields. In this way, also, the patients themselves greatly benefit. The specialist attached to a general hospital never regards his patients merely as eyes, or joints, or limbs, or wombs, or nerves, or bowels; he takes a wider view of their case—in fact, he remembers that the possessor of a locally diseased part has also a variety of other parts and organs sympathising with that local injury. The public at large also gains indirectly; for we assert without fear of contradiction, that the education of the student is seriously deteriorated, where the specialist system is thoroughly carried out. Hospitals where students congregate are actually drained of certain classes of diseases by special medical charities; and thither medical students cannot possibly follow them. Altogether, we believe there is nothing whatever to be said in favour of any special hospitals—excepting only in the case of those which admit contagious diseases.

Dr. Forbes Winslow's journal appears this year in a transformed state, altered in title, altered in size, and altered in its character. It has taken the title of *Medical Critic* as well as *Psychological Journal*; and is to be enlarged to two hundred pages. One-half is to be devoted to the consideration of matters relating to medical politics, literature and science; psychological subjects occupying a similar space, viz., the other half of the journal. Its readers will expect to find in it something out of the common way in journalism, when they open its pages; for we find from the notice, that it will contain " a series of essays similar in literary character to the leading articles of the *Times*, and papers in the *Saturday Review*, illustrative of the *present* and *prospective* condition of the medical profession in its moral, social, political, literary, and scientific relations." We wish the Editor success in his laudable intention of distributing such highly flavoured meats to the literary appetites of his readers. But we bid him be cautious in handling his tools after the fashion of his newly assumed prototype—the *Saturday Review*. He doubtless knows that that journal has gained, not to say fairly earned for itself another title besides its own legitimate one.

We are a most remarkably conservative nation—so attached to the benefits we possess, that we often cling with tenacity to the evils which are attached to them. We see this fact strikingly exemplified in the case of punishments in the army. Despite of the death of so much red tapism and incrusted routine in its direction, antique evils still adhere to it. If anyone were at this present day to propose the introduction into our military penal code of the brutal and barbarous punishment of " branding," he would be scouted from decent society, and ranked among the ear-clippers and nose-slitters, and disembowellers-before-hanging, of the former uncivil days of society. And yet men of the highest honour and the finest sentiments do not hesitate to order, under the guise of court martialism, their fellow-soldiers to be "branded" and disfigured with a hot iron—to fix an indelible disgrace on their skins. No man, again, dare venture to propose the application of such a punishment in the case of our civil offenders, even to the blackest criminals; such a proposition would be instantly scouted by all lay members of society. Why, then, should it be retained—brutalising and degrading as it manifestly is—as a punishment for offences, such as desertion, which never can be ranked or regarded as a criminal offence? If we understand the matter aright, it is nominally the business of the surgeon to perform the operation; though we need hardly say, that no member of our profession would disgrace himself by its performance. The fact, however, points out the times when such a punishment was invented; and how little it is in accord with our present feelings and ideas of punishment. Our modern ideas of retribution are wholly turned in the direction of reformation. We hang a man for murder; but so long as we keep him alive, we hold out to the criminal some kind of inducements to better conduct—even to the worst of them. But to fix an indelible stain of infamy on a man, that when no longer a criminal he may still bear ever about with him the remembrance and mark of his former crime, is a refined species of cruelty and brutality, as we have said, thoroughly inconsistent with the present state of society in this country.

We have received from Mr. Prankerd a correspondence which he has had with the Horse Guards. The grievance which he submitted to that authority is certainly a very proper one to call their attention to, and no doubt there is still a good deal to be done in that quarter before official red tapism is cleaned out of it. We must not, however, forget what an immense deal has been done of late in the putting straight of that house. We have only to compare the condition of our army in China with the figure it cut in the early days of the Crimean miseries, to learn the improvement in its government which has taken place. Mr. Prankerd writes as follows to the Horse Guards:—

"For upwards of three weeks past, I have been attending George Bathe, a soldier in the 2nd battalion of the 6th regiment of foot, stationed at Cork, who is suffering from illness, wholly caused by the insufficient clothing with which he was furnished, on leaving Cork on the 2nd November. It appears that he was refused by the pay-sergeant, acting under his captain's orders, the use of his great coat, and was consequently exposed, during the whole of the passage from Cork to Bristol, which was very rough, and extending to nearly twenty-four hours, on the deck of the vessel, without any clothing save a shirt, thin tunic, and trousers without drawers. The man is first class, and has a good conduct badge."

The soldier, it appears, died on November 30th. Mr. Prankerd received from the Horse Guards a reply, dated December 24th, stating that inquiry should be made into the case, and referring to the following circular memorandum.

"Horse Guards, 27th January, 1854.

"The General Commanding in Chief, with consent of the Master General and Board of Ordnance, authorises commanding officers of regiments to allow steady soldiers to take their great coats with them when going on furlough, during the winter months.

"The soldier taking his great coat on such occasions will be held responsible for its preservation.

"By Command. E. A. Wetherall, D.A.G."

It certainly appears curious to a layman, that a soldier's great coat is not his own property. It seems, however, difficult in a case of this kind to throw blame on the Horse Guards. As every-one well knows, there are unfortunately only too many men in the army, to whom the mere possession of a great coat, when they were on furlough, would be a direct temptation to desertion.

The supposed effect of the Third Class of Licentiates of the London College of Physicians upon the practice of pharmacy is thus expressed by the *Pharmaceutical Journal*:—

"In the number of this journal for last May, we referred to a decision which had then been recently come to by the College of Physicians of London, to create a third class of medical men connected with the College, and to be designated Licentiates of the College of Physicians. The former licentiates of the College were to be designated members, and the new licentiates were intended to occupy a position, with reference to their practice, resembling that of the apothecaries, with a restriction, however, that they should only dispense medicines for their own patients. Some opposition appears to have been offered by the apothecaries to the adoption of this regulation, which is considered to be calculated gradually to supersede the examinations at Apothecaries' Hall. Legal opinions have been taken on the subject, the result of which is that the College, having been confirmed with regard to the legality of the proposed measure, intend forthwith to carry it into effect. The influence of this new arrangement upon the members of the Pharmaceutical Society will probably be very great. It is a step towards a more complete separation than has hitherto existed in this country between the prescriber of medicines and the dealer in drugs. The Pharmaceutical Society are training up a class of qualified and examined men, to whom the practice of pharmacy in all its branches may be safely entrusted, while they have no right to practise medicine; and, on the other hand, the College of Physicians are about to initiate a class of general practitioners, who, while performing the strictly medical functions of the apothecary, will be restricted from mere trade transactions."

The Esquimaux. Sir Edward Belcher lately read an interesting paper on the Esquimaux before the Ethnological Society. He would seem to have established some identity between them and other races of Indians on the American continent. The information which he furnishes as to their intelligence and knowledge of the useful arts tends to prove, as he argues, that they are capable of civilisation. Sir Edward expresses the opinion, founded upon the extreme willingness of the Esquimaux to associate with and be taught by white men, that one or two of the crews of the *Erebus* and *Terror* may still be living among them.

DEATH OF J. W. NOBLE, M.B.CANTAB., M.P.

A telegraphic message has been received at Leicester, stating that Dr. Noble, one of the members of Parliament for that town, died last Sunday in Spain, where he has been travelling for his health, since the close of Parliament. His death was caused, we believe, by a sudden attack of cholera at Malaga; and happened under very painful circumstances, he being at the time quite alone. Dr. Noble was a graduate of the University of Cambridge; and practised for many years with great success in the town of Leicester. The esteem and respect in which he was held by his fellow-townsmen, were proved by the fact of their having returned him as their representative to Parliament in the liberal interest. We understand that the very deepest sympathy has been felt by all his fellow-townsmen at his loss. Surely no better proofs could be given of the worth of the man—than the price thus set upon him by those amongst whom he had so long lived, and to whom, therefore, he was so well known.

DR. FARADAY'S LECTURES
AT
THE ROYAL INSTITUTION.

ON A CANDLE (*concluded from p.* 19).

The fourth lecture of this course, on the Chemical History of a Candle, was delivered on the 3rd instant. The Professor acknowledged the hearty plaudits of his auditors by saying, " So you are not tired of the candle yet, or you would not welcome it as you do." The heat-giving properties of the battery introduced the subject of the present lecture, which was more especially on Oxygen and Oxy-hydrogen. Copper filings were dissolved in a mixture of nitric and sulphuric acids, and the resulting sulphate was decomposed by the electrodes of the battery. Let us see whether water may not be pulled in pieces in the same manner. The effect of the introduction of the poles into acidulated water gives the appearance of boiling. But if boiling, how would you recognise it? Surely by the condensation of the steam. Instead of which, we find gases separated which are permanently elastic. What are these gases? What properties have they? If we introduce them into a Cavendish's eudiometer from which the air has been exhausted, and pass the spark from a Leyden jar, only a feeble detonation is heard, on account of the thickness of the glass; but at the same time a deposit of moisture takes place. There must then be something more than hydrogen, for we know that hydrogen will not burn in absence of air. What can this other thing be? The gases from water can be collected separately. One of these we recognise at once. Double in bulk it is, as compared with the other; but it has all the properties of hydrogen, viz., its lightness, inflammability, pallor of flame, and necessity for air to ensure combustion. But the other, what is it? It does not burn, but it supports brilliantly the combustion of a piece of red-heat charcoal. *It is oxygen, the comburent of the hydrogen.*

Now this oxygen is evidently a colourless gas, tasteless, and without smell; and it may be made by a variety of processes. So if we take some of this black earthy-looking substance, which, for want of any other name, we will call black oxide of manganese, and heat it to redness in an iron retort furnished with a gas-delivery tube terminating under water, we can collect it in these jars. More easily still we can do so, by heating a mixture of chlorate of potash and manganese in a glass retort. So then, having collected it by these methods, how shall we identify it as one of the gases which we obtained from water? By similar means. Kindled wood and charcoal burst into bright light when plunged into it; and our candle burns with wondrous beauty therein. How great, then, its power of supporting combustion must be! Iron, sulphur, and phosphorus burn with great splendour, but especially the latter; and for the reason, that a solid body (phosphoric acid) is diffused throughout the flame.

Now we can understand why potassium burns upon water. Its power of attraction for oxygen is such that it removes it even from ice, and with such energy too as to inflame the liberated hydrogen.

The experiment of detonating soap-bubbles filled with oxyhydrogen brought the lecture to a close.

Saturday afternoon ushered in the fifth lecture. The theatre was crowded. The subject was, Nature of the Atmosphere—its Properties; Carbonic Acid, and its Properties. Professor Faraday continued:—The air which surrounds the burning candle, with the candle forms water. You know that hydrogen is contained in the candle, and you believe that oxygen supports the flame. But why does the candle burn so much better in oxygen than in air? This leads us to inquire into the nature of the atmosphere. How can we test the presence of oxygen? We can do it by this gas (nitric oxide). It looks like oxygen or hydrogen; but when opened into a bottle of oxygen, deep-red fumes arise. Nitric oxide ever tests the presence of oxygen. Is the latter in the air, then must also an orange vapour arise when nitric oxide is poured out into it.

As yet, we have but learnt that oxygen is in the air. Why does the candle burn less brightly in air? Let us examine into the result of an experiment we commenced in our last lecture. This stick of phosphorus, confined in a given quantity of air, has made a rough analysis of it for us. The water has risen, but yet the chief bulk of the air remains. The result is remarkably curious, but you will say uninteresting, because the gas remaining neither supports combustion nor is itself inflammable. What does it in the air, this gas, this nitrogen, this inactive, indifferent element, which constitutes four-fifths of its bulk? It moderates combustion, and prevents injurious action upon the lungs; its very negative properties are its best characteristics.

Have the gases weight? This diagram will give you some notion.

	One Pint.	One Cubic Foot.
Hydrogen . . .	3-4 grain	1-12 oz.
Oxygen . . .	11 9-10 grs.	1 1-3
Nitrogen . . .	10 4-10	1 1-6
Air	10 7-10	1 1-5
Carbonic acid . .	16 1-3	1 9-10

You ask me, Can we weigh the air? Nothing more easy, as experiment demonstrates. And you obtain a very fair notion of the weight of the air from the statement that the area of this theatre holds about one ton of it. It is in consequence of this weight of the air that my hand is fixed to this bladder-glass when the air is withdrawn from below. Every square inch of surface is pressed upon with a weight of nearly fifteen pounds. The materiality of air is such that I can blow an egg from one egg-cup to another. Numerous other experiments are based upon the fact.

Returning to the candle, let us examine it still further. Collecting the incondensable gas which proceeds from flame, we find that it extinguishes a lighted taper. You suppose it must be nitrogen. Let us see. Does lime-water precipitate nitrogen? But it does this gas. So, then, this is not nitrogen: it is *carbonic acid;* and this is what, in conclusion, I wish to speak to you about. Carbonic acid is a product of combustion. All chalks and shells and corals contain it. Colourless like oxygen, it has a somewhat acidulous taste, and possesses the properties of an acid. Its weight is such that you can pour it out like water; you can remove it by bucketfuls from an open vessel. Substituting a glass basin for the balance-pan, you can make it kick the beam by a vessel full of carbonic acid. Soap-bubbles filled with air float gracefully on its surface, and even an inflated collodion balloon is wafted about on carbonic acid as on the waves of the sea.

Lecture vi was on Carbonic Acid; Respiration; Carbon. It took place at the usual hour on the 8th instant.

Professor Faraday commenced by saying:—A lady who honours us with her attendance has sent me two candles from Japan. They are, I suppose, made of Japan wax. They are even more ornamental than the French candles I showed you, and have the great peculiarity of a *hollow wick*. They are evidently moulded candles, but their shape is somewhat more conical than ours.

I have told you a good deal already about the substance we call carbonic acid. We tested the gas from the candle, and we found it identical with that contained in coral, lime-stone, etc. And now as to its history. You remember a candle burning badly burns with smoke; that the black smoke in the flame gives no light, and never, when burning steadily, appears to us in its sooty form. The carbonic acid is from such smoke as that.

I am now going to show you that carbonic acid is a compound. Filling this jar with oxygen, I pour a crucible full of red hot pounded charcoal. You have myriads of centres of combustion, but no flame; *for carbon burns as a coal*, and not as flame. Whether I burn charcoal, or coal, or wood, in air or in oxygen, the result is always carbonic acid under ordinary circumstances; twenty-two parts of carbonic acid consisting of six of carbon and sixteen of oxygen. See how the charcoal is burning and dissolving in air, producing only an air: the carbon burns as a solid, dense body, into a gas, which never condenses or forms an ash.

But there is another experiment. We can take the carbon from the carbonic acid. Here we have a bottle of the gas. You know it to be carbonic acid by its weight and by its extinguishing a lighted taper. A piece of heated potassium burns in it, takes away the oxygen, and leaves the carbon.

Now carbon must be present in all ordinary fuel. You observe it in this piece of burning wood. It is true, you cannot see it in many kinds of fuel. Here we have a bottleful of a colourless gas (heavy carburetted hydrogen). It burns with a splendid white light, and you rightly judge this flame to arise from heated carbon. But I can *prove* to you that it coutains carbon; for, on mixing some of it with another gas (chlorine), and applying a light, clouds of soot, of carbon, fall out of the burning fuel.

Having repeatedly shown you that burnt carbon does not remain a solid body, I would wish you to observe that this is a very uncommon feature of the elements. This pyrophoric lead is in such a fine state of division that it takes fire on being shaken into the air; but the product of combustion is a solid, and so effectually excludes the air from the interior that it soon ceases to burn. Supposing, then, such a body to be in the candle, it would, in burning, continually form a vapour clouding our sight.

But I must now lead you to a most interesting kind of combustion. In every one of us there is a living kind of combustion going on. I may make it clear by a very simple apparatus. There is a groove in this small board, containing a tube about three-quarters of an inch in diameter. At right angles, I can introduce two other glass tubes communicating with the one in the board. You observe a lighted taper burns well at the bottom of one of the vertical tubes. But if I place a second taper at the bottom of the other vertical tube, the flame of one is extinguished by that of the other. And so too, if I allow the air from my lungs (by including the entrance into the first tube in my mouth) to be drawn through the apparatus, the taper is also put out.

Again, an examination of the breath shows us that it precipitates lime-water and extinguishes flame. You see how bad the air becomes by one simple respiration. You begin to realise that the atmosphere which I have spoilt by respiration is spoilt by carbonic acid. What is this process within us, necessary by day and by night, which is so essential that it takes place involuntarily? What is this respiration?

We consume food of various kinds, which, after divers changes, enters into the blood and the lungs through certain vessels. Just as the candle burns and evolves both heat and carbonic acid, so does the air unite with the carbon and hydrogen of the blood, giving rise to heat, to carbonic acid, and to water.

Take sugar as an illustration of food. It contains carbon, and hydrogen, and oxygen; the latter in the proportion to form water. Oil of vitriol compels the elements of water to unite, *leaving* the carbon; but, if I rapidly oxidise the sugar (equal weights of pounded sugar and chlorate of potash deflagrated by a drop of oil of vitriol), the carbon is also completely oxidised. The process is indeed different in form from respiration, but not in kind.

What a quantity of carbon must pass from the candle! What a much larger quantity must come from ourselves! A man converts seven ounces of carbon daily into carbonic acid, a cow seventy ounces, and a horse seventy-nine ounces. You see seventy-nine ounces of charcoal weighed out before you, so that you may judge of the amount. What do you think, when I tell you that five millions of pounds of carbonic acid are formed in London every twenty-four hours by the process of respiration—five hundred and forty-eight tons of carbon daily changed into carbonic acid! And this carbonic acid, so injurious to animals, is the very life of plants. That piece of wood (pointing to it); all the trees which gave us that charcoal, derived the carbon from the carbonic acid of the air. What is health to one is disease to another. The plant, by its leaves, inhales carbonic acid, giving out an equal volume of pure oxygen—the life of the animal!

One other little point of difference between the combustion of respiration and of flame. Carbon remains unchanged at ordinary temperatures for ages; *it waits for our action.* Those candles, too, wait for us without undergoing changes. Take a jet of gas; it streams into the air; it does not burn; it waits for a red heat before it burns, before its affinities come into play. A piece of guncotton explodes at a temperature which has no effect upon gunpowder. The carbon, then, of the guncotton starts into activity at a lower temperature than that of the gunpowder. Even phosphorus waits. But, as regards our bodies, they need not wait. The oxygen of the air, in all climes, enters into combination with the carbon of the blood, to form carbonic acid.

I could detain you for hours (said the Professor); but all things must come to an end. All I can say is, may your lives shine as the light from a candle; may you prove useful in your generation; and may your acts be of a character to shed a lustre upon your time.

And so, amidst well deserved applause and the usual rush of the children to the table, closed the lectures on the Chemical History of the Candle. We thought a sketch would be acceptable to our readers; and, although the truthfullest transcript of each word would altogether fail to convey the effect produced by his earnest eloquence, we have given the substance.

Progress of Medical Science.

LARDACEOUS, WAXY, OR AMYLOID DEGENERATION.

In a lengthened and able review upon this subject, which appears in the December number of the *Archives Générales de Médecine*, the writer arrives at the following conclusions:

1. That the lardaceous, waxy, and amyloid diseases are all one and the same affection, although it may yet be shewn that varieties exist according to the microscopic appearances, the chemical reaction, the seat, and the greater or less diffusion of the morbid deposit.

2. That the morbid alteration in question is constituted, histologically, of a substance appearing to occupy primarily the walls of the arteries; and secondarily, the cells of the parenchyma. This deposit consists, at first, of transparent homogeneous corpuscles of very various forms, and without any nuclei or appreciable cell-membranes. These corpuscles are at first distinct, but ultimately become fused into a mass, which is infiltrated between the natural tissues, and effects their removal, with the result of increasing greatly the density of the affected organ.

3. That the red reaction produced by iodine alone, and the blue reaction caused by iodine together with sulphuric acid, can only be regarded provisionally as characteristic of the deposit.

4. That the morbid material is neither cholesterine, nor starch, nor cellulose, nor any other vegetable product, such as different writers have endeavoured to prove.

5. That the clinical facts hitherto collected, are neither sufficiently numerous nor decisive to enable us to draw up a clinical history of the lesion.

6. That the disease in question appears rather to correspond to certain undetermined phases of such cachexiæ as the syphilitic and tubercular, than to constitute a special cachexia of itself.

SCABIES AND ITS TREATMENT IN PROFESSOR HEBRA'S CLINIQUE.

In an account of Professor Hebra's Clinique, published by Dr. Christ. Müllner, the following observations are made with reference to scabies. Of 1,297 cases, 1,144 were males, and only 153 females. Most of the patients were shoemakers, tailors, or joiners. The phenomena produced by the itch-insect are described as burrowings, vesicles, pustules, and tubercles. The last are most common at places subjected to constant pressure, such as the hips, elbows, and knees. In Hebra's experience, all methods of treatment which do not include sulphur, are more or less uncertain. An ointment which Hebra uses, is composed as follows:

Sulph. depurat., olei fagi, āā ℥vj; saponis viridis,
unguent. simp., āā lb. j; cretæ albæ ℥iv. M.

The patient is well rubbed, night and morning, for two days with this ointment; and during the whole of this period he remains wrapped in a sheet smeared with the same ointment. On the third day he has a bath; and is usually, by this time, completely and permanently cured. This plan of treatment is rather apt to excite an artificial eczema. It is attended by a disagreeable odour; and the confinement and wrapping in the sheet may be inconvenient. To meet these drawbacks, Hebra occasionally has recourse to the following applications:

℞. Sulphur sublimat., bituminis fagi, cretæ, āā ℥iij;
saponis viridis, alcohol. rectific., āā ℥vj. M.

This is likewise to be rubbed in twice a day. Its advantage over the former, is, that the patient may go about, and continue to follow his ordinary avocations. The treatment, however, requires several days; and the disease is more apt to return.

The bitumen fagi is the resin obtained from the *fagus sylvatica*, or common beech. Sapo viridis is a coarse soap prepared from train-oil and solution of potash. (*Prag. Vierteljahrschrift*, 1860. *Vierter Bd. Analek.*, p. 92.)

COPAIBA IN THE TREATMENT OF PSORIASIS.

M. Hardy, of the Hospital of St. Louis at Paris, has been in the habit of treating psoriasis with balsam of copaiba, in doses of from a drachm to a drachm and a half in the day. The balsam is administered in combination with an equal quantity of magnesia. Dr. Dupuy, an *interne* of the hospital, in his inaugural thesis (lately published at Paris), although he admits that, in some cases of psoriasis, no benefit is derived from the treatment, or the disease returns, maintains that the remedy very frequently appears to exert a specific action; and that, generally speaking, it is very superior to tonics or arsenic. (*Valleix, Guide du Méd. Praticien*, tome v, p. 502, 1861.)

A NEW METHOD OF TREATING DIPHTHERIA.

In a memoir presented to the French Academy of Sciences, on the 26th November 1860, Dr. Aubrun announces a new mode of treating diphtheria, which consists in the internal administration of large doses of the perchloride of iron. The dose for an infant varies from twenty to forty drops, from seven to ten times in the twenty-four hours. The solution employed consists of one part of the anhydrous salt to three parts of water, and each dose is given diluted in water. The diet is restricted to cold milk frequently administered; and the false membranes are carefully removed, so as not to impede respiration. In urgent cases tracheotomy is performed. Dr. Aubrun states that, during the last three years, he has employed this treatment in thirty-nine cases, and that thirty-five of the patients recovered. (*Gazette Méd. de Paris*, Dec. 8th, 1860, p. 764.)

TRACHEOTOMY IN CROUP.

Dr. Fock, physician to the hospital at Magdeburg, has published an account of twenty four cases of croup where tracheotomy was performed. In all of the cases the operation was only had recourse to in the very last stage of the malady, when all hopes of recovery from other means had already ceased; but, notwithstanding the unfavourable condition of the patients, ten of them recovered. For the bronchitis, which frequently follows the operation, he is in the habit of prescribing bicarbonate of soda with infusion of digitalis and syrup; or, if there be much expectoration, decoction of senega with ammonia and syrup. (*Gazette Méd. de Paris*, Dec. 1, 1860.)

RED FRINGE ALONG THE GUMS AS AN INDICATION OF PHTHISIS.

Dr. Dutchet, of Pennsylvania, corroborates the importance of the red fringe along the edge of the gums as an indication of phthisis, which was first pointed out by the late Dr. Theophilus Thompson. Of fifty-eight phthisical patients, he found the phenomenon in question present in forty-eight. It was more common in males than in females, and in young persons than in adults. Sometimes it preceded all the other signs of pulmonary phthisis two or three years. Dr. Dutchet regards it as an infallible sign of the tubercular diathesis, and believes that, when it exists, however obscure all the other symptoms may be, it announces, in the most unequivocal manner, the near approach of confirmed phthisis. According to him, the sign is also of importance in prognosis. When the fringe becomes paler under treatment, the prognosis is favourable, and *vice versâ*. (*Gaz. des Hôpitaux*, Dec. 1, 1860.)

MARRIAGE OF EPILEPTICS.

In an article recently published in the *Gazette des Hôpitaux*, Dr. Legrande du Saulle adduces a number of arguments to prove that persons subject to epilepsy cannot marry without risking an aggravation of their complaint; while the children of such marriages will probably also be epileptic. Although the epileptic fits may have ceased for years, they are apt to be reproduced by the excitement of the sexual organs. (*Gaz. des Hôp.*, Dec. 20, p. 593.)

FRACTURE OF BOTH FEMURS BY MUSCULAR SPASM IN AN EPILEPTIC FIT.

The following case is recorded by Dr. F. D. Lente in the *North American Med.-Chir. Review* for November 1860. A boy, aged 12 years, had been subject to epileptic fits since he was fifteen months old. On April 10th, 1859, he had a succession of violent convulsive fits. While the attendants were holding him down in bed, by the shoulders, a loud snap was heard, and it was found that the left femur had fractured at the junction of the upper with the middle third. The thigh, at the time of the fracture, was observed to be flexed with great force upon the pelvis. A splint was applied, and firm osseous union resulted; but on the 13th of the following December, the right femur fractured under precisely similar circumstances. After this, the boy continued to sink, and died January 29th, 1860.

PERMANENT LOSS OF SPEECH AS A SEQUELA OF TYPHOID FEVER.

M. Baudelocque, on the 22nd October, 1860, communicated to the Academy of Sciences the details of a case of permanent loss of speech supervening upon typhoid fever. The patient was a soldier, aged 23, who was attacked with typhoid fever in the Crimea, in the spring of 1856. He recovered from the fever; but up to September, 1860, he continued perfectly dumb. He had been admitted as a pensioner of the Hôtel des Invalides, under the uncommon designation of "muet, non sourd." (*Bullet. de l'Acad. des Sciences*, Oct. 22, 1860.)

CASE OF CHYLOUS URINE CURED BY IODIDE OF POTASSIUM.

Mr. George Davis, of the Madras Medical Service, records a case of chylous urine occurring in a man aged 33. The patient's urine had, for three years, borne a close resemblance to milk, when Mr. Davis was called to see him, on Sept. 7, 1858, for an attack of rheumatism. The urine was devoid of urinous odour, had a milky appearance, and, when boiled, deposited a white curdy substance which dissolved in ether. Iodide of potassium, which was at first prescribed for the rheumatism, was observed to have a remarkable effect upon the urine, in rendering the chylous appearance less marked. It was accordingly persisted in for twenty-seven days, in doses of five grains three times a day. By the end of this time the chylous state of the urine had quite disappeared; and, up to June 1860, had never returned. In this case the general health of the patient was not at all impaired in consequence of the chylous condition of the urine; and a similar observation was made in three other cases of chylous urine which had come under Mr. Davis's notice. (*Madras Medical Journ.*, 1860.)

MORTALITY FROM EXCISION OF THE KNEE-JOINT.

In a memoir read before the New York Academy of Medicine, Dr. Krackowitzer discusses more particularly the mortality attending excision of the knee-joint, and the objections which have been urged against the operation. He has collected, from various sources, two hundred and thirty-three cases, which give a result of sixty-three deaths and twenty subsequent amputations; the rate of mortality being twenty-seven in a hundred; or, including the subsequent amputations, the ratio of failures being thirty-six in a hundred. Of the two hundred and thirty-three cases, thirteen occurred in the practice of American surgeons. Four of the thirteen patients died, and two were under treatment at the time of the report, with every prospect of recovering a good limb. (*American Med. Times*, Sept. 15th, 1860.)

A Dropsical Epitaph. *Harpers' Monthly*, among a selection of epitaphs, gives the following:—

Here lies Dame Mary Page,
Relict of Sir Gregory Page, Bart.
She departed this life March 4, 1728,
In the 56th year of her age.
In 67 months she was tapped 66 times, &
Had taken away 240 gallons of water.

Medical News.

University of St. Andrew's. List of gentlemen on whom the degree of Doctor of Medicine was conferred, on January 2nd, 1861:—

Belcher, John Waring, L.R.C.S.I., London
Bell, John Henry, M.R.C.S. & L.A.C., Bradford
Bennett, William R., L.R.C.S.I., Royal Navy
Boycott, Thomas, M.R.C.S. & L.A.C., Bombay Army
Broad, James, M.R.C.S. & L.A.C., London
Bush, Danvers Ward, M.R.C.S. & L.A.C., Weston-on-Batt
Caldwell, William T. D., M.R.C.S., London
Callon, William Joseph, M.R.C.S. & L.A.C., Liverpool
Capper, Jasper, Liverpool
Cockroft, John, M.R.C.S. & L.A.C., Middleham, Yorkshire
Cotton, Thomas, M.R.C.S. & L.A.C., Spalding
Fox, Charles Henry, M.R.C.S., Brislington, Somerset
Greene, James A., Calcutta
Hatton, John, F.R.C.S. & L.A.C., Manchester
Hutchinson, Valentine, M.R.C.S. & L.A.C., Bishop Auckland
Iles, Albert, M.R.C.S. & L.A.C., L.R.C.P.Ed., Cirencester
Kidd, Henry Alex., Calcutta
Lemon, Henry M., L.A.C., Welshpool
Mackertich, Simon, M.R.C.S., Indian Army
Ninnis, Belgrave, London
Payne, Edwin, M.R.C.S. & L.R.C.P. (by exam.), London
Pell, Walton N., M.R.C.S., Northampton
Pollock, Arthur J., M.R.C.S. & M.R.C.P., London
Prall, Samuel, M.R.C.S. & L.A.C., West Malling, Kent
Simpson, Pierce A., M.R.C.S.Ed. & M.R.C.P.E., B.A.Cantab., Dublin
Tanner, Mark B., M.R.C.S., Exeter, Devon
Truman, Edgar B., M.R.C.S. & L.A.C., Nottingham
Vanderstraaten, John, Ceylon
Walker, George C., M.R.C.S., Kirkdale, Liverpool
Warner, John, M.R.C.S. & L.A.C., Leighton Buzzard
William, John, L.A.C., Dyffryn, Merionethshire
Williams, Charles R., M.R.C.S. & L.A.C., Leamington

APPOINTMENTS.

*Good, John, Esq., of Dorchester, appointed Surgeon to the Dorset County Gaol, in the place of Christopher Arden, Esq., who has retired, after holding the appointment for fifty years.

*Smith, Tyler, M.D., elected President of the Obstetrical Society in the place of the late Dr. Rigby,

Stokes, William, M.D., appointed Physician in Ordinary to the Queen in Ireland, in place of the late Sir H. Marsh.

Wilde, W. R., Esq., appointed one of the Commissioners for taking the Census in Ireland.

Royal Army. The following appointments have been made:—

Chappell, J. J., M.D., Staff-Assistant-Surgeon, to be Assistant-Surgeon 48th Foot, *vice* J. V. de Bossière, M.D.

De Bossiere, J. V., M.D., from 48th Foot, to be Staff-Assistant-Surgeon, *vice* Mackinnon.

Mackinnon, W. A., Esq., Staff-Assistant-Surgeon, to be Staff-Surgeon.

Royal Navy. The following appointments have been made:—

Baird, W. J., M.D., Surgeon, to the *Barracouta*.
Beith, Robert, M.D., Surgeon, to Plymouth Hospital.
Dalby, William B., M.D., Surgeon, to the *Narcissus*.
Ingles, John C., Esq., Surgeon, to the *Ariadne*.
Mackay, George, M.D., appointed Deputy Medical Inspector-General at Hongkong.
Magill, Martin, Esq., Assistant-Surgeon, to the *Sanspareil*.
Somerville, Thomas, Esq., Surgeon, to the *Cornwallis*.
Stewart, John (*b*), M.D., Surgeon, to the *Majestic*.
Wood, William, M.D., Surgeon, to the *Edgar*.
Woods, William H., Esq., Surgeon, to the *Trident*.

BIRTH.

Of a daughter, the wife of—

*Gardner, F., Esq., South Molton, on January 4.

MARRIAGE.

Williams, the Rev. Eleazar, B.A., Incumbent of Ty-dweiliog and Llangwnadl, Carnarvonshire, to Margaret Emma, only daughter of *Ellis Jones, Esq., Abercrombie Square, Liverpool, at St. Bride's Church, Liverpool, on January 3.

DEATHS.

Ireland, John, Esq., Surgeon, Finsbury, aged 69, on January 4.

Shute, Theodore H., M.D., Newton Abbot, aged 48, on December 29th, 1860.

New College at Quebec. Dr. Morrin, of Quebec, has devoted some £10,000 for the establishment of a college, etc.

M. Longet has been elected by ballot a member of the Section of Anatomy and Zoology of the Academy of Sciences, in the room of M. Duméril, deceased.

County of Durham Asylum. A deputation in regard to the increased expenditure of the county of Durham Lunatic Asylum had an interview with Sir George C. Lewis a few days since at the Home Office.

"M. Soliniac," wrote Guy Patin some 200 years ago, "is a very common species of man *in arte nostrâ*; he has the two vices of his country, which are Dames Philargery and Polypharmacy."

The Remains of Harvey. The question of removing the remains of Harvey from their present disturbed resting place to Westminster Abbey has been under discussion at the College of Physicians.

A New Natural History Review is announced in London, in the editing of which a part will be taken by Dr. Carpenter, Mr. Busk, Professor Huxley, and others.

Alum in Bread. The *Bath Express* contains the results of the analyses for alum of fifteen samples of bread purchased of bakers resident in the town. In all the loaves, with a single exception, that pernicious substance was ascertained to be present.

The College of Surgeons has published its annual balance sheet. The receipts amount to £22,307, but of this £4756 comes from sale of stock. The other side shows £21,906 expended; £7760 for new premises; £9215 "College Department"; and £634 library.

Danger of Street Slides. The records of the Accidental Death Insurance Company show no fewer than twenty-two serious accidents from this cause alone in the space of a fortnight, including three broken legs and two spinal concussions.

Royal College of Surgeons. The newly published list of the College of Surgeons of England shows that 249 members have been admitted fellows of examination, 16 more than last year. There are now 1267 fellows and 14,000 members, 769 licentiates in midwifery, and 100 licentiates in dental surgery.

Mortality among Medical Men. We learn from the *Medical Directory* for the present year, that "death has been unusually busy in our ranks during the past year;" and that "our obituary records the decease of upwards of five hundred medical men; the average duration of whose lives was 56."

Army Medical Service. In the Medical Department of the army the following deaths have occurred during the last three months:—Inspector-General W. Henry, and Deputy-Inspectors-General J. W. Halahan and C. Dempsy; Surgeons J. S. Grant, J. Hoffman, F. M. Tweddall, and T. J. Atkinson; Assistant Surgeons C. Bagot, W. D. Carbery, T. C. Beale, W. M. Testrail, and C. D. Campbell.

Iodide of Starch. M. Duroy, of the Academy of Sciences, has announced the discovery of a new neutral and colourless iodide of starch. It is well known that iodine gives a blue colour to starch, thus forming an iodide. M. Duroy brings this iodide into contact with yeast, and thus deprives it of its colour. In this state it is very soluble in water, insoluble in alcohol, sweet, gummy, and incapable of crystalisation.

Sanitary State of the Army. We (*Medical Critic*) are glad to hear that the Army Medical Department is preparing, under the energetic rule of Dr. Gilson, and with the able help of Dr. Mapleton, Dr. Balfour, and Mr. Fitzgerald, to bring out a first printed annual report of the health, sickness, and death rate of the British army at home and abroad. Such returns will be highly interesting, as bringing the army henceforth under the critical observation of civil sanitarians, and furnishing reliable data for discussion.

Bequests. Each of the ten charitable institutions hereunder mentioned come in for a legacy of £400 under the will of Thomas Thornton, Esq., of Brighton, —namely, King's College Hospital, Deaf and Dumb Asylum, School for Indigent Blind, Asylum for Idiots (Reigate), Philanthropic Society, Governess's Benevolent Institution, London Orphan Asylum, Merchant Seamen's Orphan School, Sussex County Hospital, and the Brighton Infirmary. (*Illustrated London News.*)

Abolition of Fees to Coroners. The act of last session to abolish the fees to county coroners is now in operation. Henceforth they will be paid by salary instead of fees. The amount is to be paid by the justices in session, and in the event of any disagreement between coroners and justices the Home Secretary is to settle the amount to be paid. The salary is to be based on an average of the income of five years. According to the new law a revision of the salaries can be made every five years.

The Health of the Army in China. Private letters received at Chatham from the battalion of Royal Marines serving in China report both officers and men to be in excellent health, the daily average of sickness being very small. At the date of the last mail the Marines were just retiring from the city of Pekin, and would move down to Hongkong, where it was expected they would immediately embark for England, in which case they may be expected to arrive home about the middle of the summer.

The Asylum for Idiots, Earlswood. The annual entertainment to the inmates of the above institution took place on Monday evening. The society has become a large one, but the demands made upon it are greater than its means. There are upwards of 320 inmates, part of whom are paid for by friends and the rest elected for life, or for a term, as the case may be. The Board, anxious to meet the wishes of a large number of the subscribers, determined last year to admit some of the cases for life, and ten have already been received. Of course, this step entails increased responsibilities upon them.

Harveian Society of London. The following officers for the year 1861 have been elected:—*President:* E. H. Sieveking, M.D. *Vice-Presidents:* E. Headlam Greenhow, M.D; J. C. Langmore, M.B.; Weeden Cooke, Esq.; H. C. Stewart, L.R.C.P.Ed. *Treasurer:* H. W. Fuller, M.D. *Honorary Secretaries:* W. Wadham, M.D.; G. T. Browning, M.D. *Council:* William Adams, Esq.; Albert J. Bernays, M.A., Ph.D.; Charles Browning, Esq.; E. H. Harrisson, Esq.; E. S. Haviland, M.D.; W. Sedgwick, Esq.; Frederick Cock, M.D.; Alfred Collinson, M.D.; J. Brendon Curgenven, Esq.; Thos. K. Hornidge, M.B.; W. Boyd Mushet, M.B.; Wm. O. Priestley, M.D.

Increase of Lunacy. Official statements exhibit a considerable increase of lunacy in the eastern district. At the Essex Quarter Sessions in the course of the current week the number of patients in the county asylum was reported to be 447, as compared with 419 at the close of 1859, 406 in 1858, 399 in 1857, 370 in 1856, 334 in 1855, and 307 in 1854. At the Norfolk Sessions also the number in confinement exhibited an increase of twelve upon the preceding return, and a similar augmentation has been observable for the last five or six years. Of course, some allowance ought to be made for the growth of population; but the increase of insanity seems to have proceeded in a more rapid ratio.

How Stumps used to be Dressed. Ravaton, a French surgeon of the early part of the last century, who described a method of amputating by rectangular lateral flaps, gives directions for dressing the stump to the following effect. The two flaps are to be secured together by slips of linen spread with sticking plaister, about an inch broad; another slip is also to be passed round the stump directly below the place where the bone is cut off. Over this are to be placed the following dressings: first, a very thick pledget, forming a sort of quilt or cushion, and covering the end of the stump; secondly, two square compresses, pretty thick, and laid upon the sides of the flaps to keep them pressed one against the other; thirdly, a crucial compress; fourthly, the whole is to be supported by five or six turns of a roller, drawn moderately tight, and applied in such a manner as not to bring together the lips of the posterior incision. And last, over the whole is to be drawn a woollen cap, to preserve the warmth of the stump.

Frogs in Stone. The French Academy of Sciences some months since had under their cognisance the subject of live frogs found in stones. Dr. Baudet-Dulary, who lives in the neighbourhood of Blois, gives an account of one of the supposed cases:—"I lived near Blois," he says, "when the discovery of the famous batrachian was made, and I made special inquiries about it from several persons. Three labourers were cleaning out an old well. One of them broke a flint, in which was a cavity—a thing rare enough—and at the same moment he saw a frog hop—a thing common enough in old wells. He thereupon said to his comrades, 'The frog jumped out of this stone.' The good fellows, not very intelligent however, at once exclaimed in chorus, 'The frog jumped out of the flint.' And thus it was decided, for men—*savans* or workmen—love the marvellous. This is certain, at least: the frog and the stone were deposited in the museum at Blois. One thing appears to me very probable, namely, that the frog never was in the stone. Indeed, when a fact may be explained very simply, a marvellous explanation of it should be rejected."

The present Cold and Increased Death Rate. "That the cold which has been experienced in the last three weeks, however 'seasonable' it may be to the young and robust, the well-fed and well-clothed, is destructive to the health and life of others who are less able to resist it, the weekly returns now bear sufficient testimony. In the last two weeks of 1860 the deaths in London were 1269 and 1407; in the first week of the new year they rose to 1707. In the early part of December the mean temperature of the air was 43°; in the three weeks that followed, and that ended last Saturday, it was successively 32.1°, 25.9°, and 32.4°. On Friday the 4th instant the lowest temperature was 20.5°, and the mean 28°. The average number of deaths as derived from the first week in each of the ten years 1851-60, and corrected for increase of population, is 1388. The effect of the cold weather as yet developed in the returns is therefore measured by an excess of 319 deaths in one week above the estimated number. As regards zymotic diseases the chief facts to be remarked are a great increase in scarlatina and in whooping-cough. No less than 8 children died from measles in the sub-district of Kensington Town. Pulmonary diseases, which include 485 deaths, exhibit a considerable excess on the corrected average, which is 318. The deaths of 11 persons are recorded at the age of 90 years and upwards. One of these occurred at the age of 98 years; another at 100 years in Clapton. Of the 11 aged persons only 3 were men. Nineteen persons, principally children, died by burns, and one by scalds; five are stated to have been burnt by their clothes taking fire. Of 15 deaths by suffocation, 12 occurred to children in bed. A Dutch pilot was choked by a piece of beef, which was afterwards found to weigh one ounce. A man and a woman were returned as having perished from cold and want; the former, a painter, aged 80 years, on 27th December, at 4, Terrace Place, Stepney Green, and the latter, aged 70 years, found dead on Christmas day at the door of the Marylebone Workhouse." (*Registrar General's Report.*)

Clinical Lecture

ON THE

PROGNOSIS AND TREATMENT OF THORACIC ANEURISM.

DELIVERED JANUARY 5TH, 1861, AT ST. MARY'S HOSPITAL, LONDON.

By T. K. CHAMBERS, M.D., Censor of the College of Physicians, and Physician to St. Mary's Hospital.

I admitted yesterday into Victoria Ward a prostitute, aged 22, who has been nearly a year in the Lock Hospital. She has had syphilis more or less since the age of 14; and though the secondary sores are now healed, her health is naturally much broken, and she looks anæmic and weakly. She comes into St. Mary's, not for this disease, but on account of palpitations and pain across the front of the chest, which, she states, she has experienced for three years, but which lately have got much worse. She has also frequent giddiness and fainting; and last Sunday was carried out of the Lock chapel in a dead swoon. The house-surgeon has just been in to report that on account of one of these attacks she is unable to come down to the theatre, as I had desired.

She has often a difficulty in swallowing food, especially solids.

She states that she has very partial use of the left arm; and, on examination, it is smaller in girth to a marked degree, and the muscles are flabbier than on the right side. No pulse can be felt at the left wrist, nor at the bend of the elbow, nor on the inner side of the biceps. The axillary artery can be felt beating very feebly in the supraclavicular region.

In a marked contrast to this stands the right side. The pulse at the wrist is natural, and above the collar-bone may be perceived a strong pulsation, and at the origin of and for an inch or more along the carotid a very distinct thrill. In the hollow above the sternum the same pulsation is even stronger, and throws forward the trachea, when you press upon it with your finger.

On applying the stethoscope, a purring whiz is heard in the situation of the pulsation. A murmur is heard also in the upper part of the sternum, and is particularly loud at the level of the fourth costal cartilage, where it is sometimes accompanied by a musical note. There is no dulness on percussion beneath the clavicle.

My diagnosis of this case is, that she has an aneurism of the ascending aorta at the point where the innominata is given off, and that this aneurism involves the innominata and the origin of the carotid artery. I do not think it an aneurism of the innominata alone, because of its being situated so much at the back of the trachea as to throw it forward by its pulsation, and also to press upon the œsophagus, and interfere with deglutition. Besides, in the only case I have seen during life of aneurism of the innominata, proved to be so after death, the tumour was smaller, rounder, and pointing more distinctly in the supraclavicular hollow.

You have here nearly all the signs of aneurism of the aorta—(1), pulsation; (2), whiz; (3), impaired deglutition; and (4), impeded circulation.

But you may say there is the same whiz at the aortic valves. What is the cause of that? It is not, I think, produced directly by aortic aneurism, but it is produced by the same original cause. An aneurism forms because there is a friability or loss of elasticity in the coats of the vessels, due generally to a deposit of white opaque matter and to a partial degeneration of them. What is more likely than the existence of the same disease in the aortic valves?

Now I come to the puzzling part of the case. You will observe that the right axillary artery is quite free; there is quite an open passage through it to supply the radial at the right wrist. Yet it is in this supraclavicular space that we have the pulsation and whiz; whereas the left axillary, though it has normally nothing to do with the innominata, is not supplied with blood, and the left arm is atrophied.

I can account for this in one way, which I might as well detail, though it is more a physiological than a medical matter. I do not bind you to accept the interpretation; and if any of you, fresh from the anatomy school, can suggest a better, I shall receive it with pleasure. In many beasts, ruminants and solidungula, and in some pachydermata—as for instance, the hog—the aorta divides into two branches, the *ascending*, giving off the two subclavians and the two carotids, while the other turns backward and becomes the *descending* aorta. On this has been founded, by the earlier anatomists, the division of the aorta into "ascending" and "descending", a division awkward in the human species, but exceedingly applicable to the domestic animals, whence they learnt their anatomy. Now, it is by no means impossible that the patient before us may have a malformation, which is an approach to this lower condition of animal life—a malformation, of which specimens may be seen in many museums; namely, where the left subclavian, as well as the right, is given off by the innominata, and has to cross over the arch of the aorta to get to its work; and in this crossing it would be interfered with by the tumour of the top of the arch. I cannot otherwise explain the puzzle, as the tumour is not large enough to obstruct a normal left subclavian. As an argument in support of the explanation, I may mention that the patient has a congenital deficiency of the reproductive organs, curious in a social point of view for a person of her degraded occupation. She has no uterus, the vagina ending in a short *cul-de-sac*. A malformation in one part is a probable argument for it in another.

This aneurism presents several points which induce me to pronounce an unfavourable prognosis. *First.* It is in the ascending part of the aorta. Now, you will find that almost all aneurisms of the ascending aorta are rather dilatations than aneurismal sacs. They have no sharp edge, opening out suddenly into a distinct bag. And these are more difficult of cure than the sharp-edged sacs, because there is a clear stream through, and no back current, so that you cannot get clots to form in them. *Secondly.* The absence of clots is confirmed by the strength of the thrill. *Thirdly.* The supply of blood to the brain is seriously diminished, as is shown by her fainting fits. *Fourthly.* The impeded deglutition and the suspected malformation are discouraging. *Fifthly.* She is a poor anæmic woman, reduced by poverty, disease, and physicking, to a very low state. She will not bear lowering treatment, I fear. *Sixthly.* Like many of her unhappy class, she is said to have a violent temper; so it will be difficult to keep her in the hospital, or to keep her circulation quiet while there. It is doubtful how far we shall be able to apply the treatment appropriate for the disease, and how far it will be successful, if applied. What that treatment is, I shall best illustrate to you in the next case.

Henry E., a negro, aged 21, was admitted two months ago—viz., on November 9th—into Albert Ward. He is now a commercial traveller, but during the Crimean war was a sailor in a transport, during which time he once got a severe blow on the back of the neck from a "derrick". He says he never had cough or shortness of breath, and was always "strong in the chest", till he began to have pain there three months before admission, especially in the left supramammary region. This pain increased gradually, though intermittingly. Three days before admission, while he was at his tea at Windsor, it suddenly increased very much, and he says he felt "as if something was going up and down from his heart to his arm". He says he fell down, unable to speak, and found that he had lost the use of the left arm. On examination, it was found that the pulse in the left wrist was much weaker than in the right, and there was loss of power, though not absolute paralysis, throughout the left upper extremity. The throat was swelled on the left side, and the carotid could scarcely be felt. There was considerable swelling of the whole mammary and infraclavicular regions, in which latter also there could be distinctly made out comparative dulness on percussion. This dulness was more distinct on the third rib than immediately beneath the collar-bone. On applying the stethoscope to the third rib, a distant whizzing murmur could be heard, which increased in intensity in nearing the shoulder, and diminished towards the sternum. There was no pulsating tumour, and the lung-sounds were natural, except perhaps rather more bronchial on the left side than on the other. There was a breathing pulsation in the left jugular vein.

The signs of aneurism were not so distinct as in the last case, because it did not come so near the surface. I am inclined to think it is towards the back part of the descending part of the arch; but wherever its exact locality may be, it evidently interfered with both arteries, veins, and nerves, which supply the arm, cutting of the pulse-wave, and intercepting the nervous current, and causing swelling by obstructing the return of blood by the veins.

I thought local treatment desirable, and applied leeches several times beneath the clavicle. I should have bled him also; but, five days after admission, he fortunately caught scarlet fever from a neighbouring patient. It struck me that this might prove a substitute for venesection; it enabled us to keep him a close prisoner in bed, and to put him on very low diet. And this plan was the easier carried out from his being, like most civilised Africans, of a mild tractable disposition. It has been pursued steadily up to the present time. On December 1st, I find it noted that he had recovered the power over his arm, and that the pulses appeared nearly equal. He has continued the complete rest, and has taken prussic acid and digitalis. I cannot now detect any difference between the radials, and he has complete use of the arm. He expresses himself as quite well, and finds a bandage which he wears across the mammary region relieves the occasional pains. There is a murmur still in the infraclavicular region; but all impediment to circulation afforded by the aneurism has ceased, and he is going to be an out-patient.

The treatment which has been adopted here is an exemplification of the principles which I have taught in the lectures on the Principles of Medicine. It is a strict following of that which nature adopts in all aneurisms that heal spontaneously. In them you find a fibrinous clot formed, and the sac shrunken up from lack of stream passing through it. We have endeavoured to make the blood disposed to form fibrinous clots, by bringing it into that fibrinous state which loss of blood, anæmia, and low diet induce; and we have endeavoured to keep the blood-stream as calm as possible by rest in the horizontal posture.

There was much in favour of this patient from the outset: the aneurism was in the descending aorta; there was no thrill; his general health was good; and he is an obedient quiet creature, very different from the ill-conditioned little woman last discussed. At all events, he has done very well; and I should urge upon you to make the carrying out of this principle of treatment the goal of your wishes in thoracic aneurism. You will find patients very often rebel, but do your best; and if you do not attain success, you will at all events deserve it.

I like in general to bleed the patients from time to time, and should have employed that mode of treatment if this man had not had the scarlet fever. A former patient of Dr. Sibson's, now an out-patient, was to have come here to day to testify from his own observation, to the superiority of venesection to leeches in its calmative influence over an aortic aneurism which he has long had, and on which he is very observant of the effect of remedies. But I suppose the frost has kept him at home.

I say you will deserve success, and sometimes you will get it. I kept a stonemason in this hospital under the bleeding and starving treatment for five weeks. He had come in with a pulsating tumour and aneurismal whiz under the left scapula, with severe pain in the floating ribs, which some thought were being absorbed. At the end of the five weeks, he rebelled; but the pulsation had disappeared, and the whiz was scarcely to be heard; and I had reason, therefore, to think the aneurism in a fair way to be cured.

Even in cases where the treatment cannot be carried out *à l'outrance*, good may be done by an approach to it. In 1851, a lady was sent to me by a surgeon in the country, to consult me about increasing corpulence and dyspnœa. In investigating the cause of the dyspnœa, I found a pulsation and an obscure whiz under the left clavicle, accompanied by deficiency of pulse in the left wrist. I was satisfied that there was aneurism either of the subclavian or of the aorta at the origin of that branch. But bleeding was undesirable, because she was so fat; and I have often told you how badly obese people bear bleeding. Moreover, she was sixty years of age. But, as she was a sensible woman, I managed to gain her confidence, and starved her for several weeks, giving her at the same time drachm doses of liquor potassæ three times a day. The effect was a reduction of her corpulence, a diminution of the pulsation in the tumour, and greater freedom of breathing. I did not see her from 1851 till 1856, when, being in London, she called to show herself, saying how well she was. The pulse in the radial had not returned; but there was no pulsation in the tumour, and only a sort of roughness in the sound of the artery. She felt confident herself of the good effect of the starving treatment.

I have taken the opportunity of your having two patients together under your eye to bring this subject before you, because of late the objections urged against venesection in excess and in improper cases have produced a fashion of decrying its use altogether, and especially in thoracic aneurism. Bleeding and starving, say they, induce debility and anæmia; that is to say, in physiological language, they lower the force of the heart, and they cause a comparative excess of fibrine over blood-discs in the blood. These are both steps towards the mode adopted by Nature to effect a cure in aneurism, and perhaps in some other diseases also. So that, I contend, not merely is it the best mode, but that it is the only honest mode, of treating aneurism of the trunk-vessels; because it is the only one we at present know consonant to *reason* and experience.

A Lecture

ON URINARY CALCULI.

BY

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Summary of the Chemical Characters of Urinany Calculi.

1. *Calculi which leave only a slight Residue after Ignition.*

Uric Acid. Murexide formed when a solution in nitric acid is evaporated and exposed to the vapour of ammonia. A mere trace of residue left after ignition. Ammonia not given off when treated with a solution of caustic potash.

Urate of Ammonia. Reaction of murexide. Ammonia evolved when treated with potash.

Urate of Soda. Reaction of murexide. Fuses and gives a yellow tint to the flame. Leaves a decided residue after ignition.

Urate of Lime. Reaction of murexide. Infusible. After ignition, carbonate of lime remains.

Urate of Magnesia. Reaction of murexide. Infusible. The residue after ignition dissolves, with slight effervescence, in dilute sulphuric acid. The magnesia is precipitated from this solution, in the form of triple phosphate, upon the addition of phosphate of soda and ammonia.

Xanthine does not exhibit the murexide reaction. The solution in nitric acid turns yellow on evaporation. It is not soluble in carbonate of potassa.

Cystine is soluble in caustic ammonia, and in carbonate of ammonia. It crystallises from an ammoniacal solution in six-sided plates.

Fibrine emits an odour of burnt feathers on ignition. Solution in caustic potash precipitated by acetic acid, and also by ferrocyanide of potassium after the addition of a little acetic acid.

2. *Calculi which leave a considerable Residue after Ignition.*

Triple or Ammoniaco-Magnesian Phosphate fuses in the blowpipe flame, and gives an ammoniacal odour. It dissolves in acetic acid without effervescence. Ammonia gives in this solution a crystalline precipitate of triple phosphate.

Phosphate of Lime does not fuse. Soluble in hydrochloric acid. Precipitated by ammonia in amorphous granules. From solution in acetic acid, the lime may be precipitated as oxalate when oxalate of ammonia is added.

Oxalate of Lime. Soluble in mineral acids, without effervescence. Precipitated from acid solution by ammonia. Insoluble in acetic acid. After ignition, residue effervesces freely on the addition of acids.

Carbonate of Lime. Soluble in acids, with effervescence. Lime precipitated from an acetic acid solution by oxalate of ammonia.

On the Origin and Formation af Urinary Calculi, and of the Nature of the Nucleus..

I have already had to refer briefly to this subject on two or three occasions. Whenever there is a tendency to the precipitation of any of the slightly soluble constituents of the urine in an insoluble form before the urine has left the organism, one of the conditions most essential to the formation of calculus is present. If an unusual quantity of any such substance should be formed, so that the urine contains a stronger solution of it than in health, very slight circumstances will lead to its deposition before the urine has left the bladder, and thus insoluble deposits occur. Each little mass of deposit may form a nucleus around which new matter collects; but, as a general rule, the deposit escapes with the urine. Often it would appear that on the surface, and in the interstices, of rough stones more especially, small quantities of urine are retained, and prevented from mixing with the general mass. Chemical changes soon occur, the immediate result of which is the further precipitation of insoluble material. If the urine alters in its character, different substances may be deposited; thus, oxalate of lime may form the nucleus of the calculus; and, after this has reached a certain size, the deposition of the oxalate may give place to that of uric acid. Again, the precipitation of this substance may cease, and several successive layers of phosphate may afterwards be formed. In some calculi, these layers alternate in a very remarkable manner.

The most interesting part of the whole process is the formation of the nucleus, and it is most important that we should study this matter very carefully. If we were able to ascertain the existence of calculi at a very early period of their formation, we could in many cases, doubtless, promote their expulsion before they attained any size, and thus most distressing suffering would often be prevented, and sometimes the necessity for a severe operation removed.

Any solid matter may form the nucleus of a calculous concretion. Inspissated mucus from any part of the urinary organs—crystals which have been deposited—cells of epithelium—ova of entozoa—pieces of fibrine and small clots of blood—foreign bodies which have been introduced from without, such as peas, portions of slate pencil, or tobacco-pipe, pins and needles, and other substances which are occasionally introduced into the urethra by silly persons. A piece of a catheter and bougie have also been found in the centre of a stone.

I have lately had my attention very forcibly directed to the formation of urinary calculi, in consequence of having met with many specimens of *microscopical calculi* in urine. It is not at all uncommon to meet with microscopic uric acid calculi—aggregations consisting of uric acid crystals, which, if retained, might receive deposits of fresh material on the outside, until the small calculi, varying in size from a mustard-seed to that of a pea or larger, are formed.

Microscopical calculi of phosphate of lime are by no means uncommon, and are often found in the kidney; but until lately I had never had an opportunity of watching the formation of calculi composed of oxalate of lime. The nucleus of these calculi does not consist of mucus or epithelium, as in the phosphatic calculus; but is of the same composition as the exterior. Fig. 54 represents a mass of dumb-bell crystals, many of which collections were passed in the urine. Although the mass is seen to consist of a number of distinct crystals, these are firmly attached, so that the whole may be rolled over and over without the individual crystals being separated from each other. Such collections I have many times seen in the uriniferous tubes in kidneys obtained from *post mortem* examinations, which leaves no doubt as to the precise seat of formation of these bodies. Gradually the interstices between the individual crystals become filled up with the same material, and at the same time a few of the larger crystals increase in size at the expense of the small ones. At length a small crystalline mass of an oval form is developed, which clearly consists of a microscopic mulberry calculus, and, if retained, will gradually increase in size. (Fig. 55.) Calculi of this description are represented in the plates containing specimens of calculi in the *Illustrations*. When such calculi reach the pelvis of the kidney, a few sometimes increase gradually by the deposition of oxalate of lime upon their exterior; while, no doubt, the greater number escape with the urine, and give no trouble. Such small bodies would easily become entangled in the mucous membrane, and might remain in the pelvis of the kidney without exciting any disturbance until they had grown so large as to cause great inconvenience. If some of them passed down the ureter into the bladder, and happened to be retained for some time in this viscus, in a case where the urine contained much oxalate, they might increase in size until too large to escape by the urethra. It is, therefore, of great importance that cases in which these dumb-bell crystals are deposited should be very carefully watched. This observation is of some interest also as showing the chemical composition of the dumb-bells, which has long been a disputed point.

As I have before stated, many small uric acid calculi, which appear to be composed entirely of this substance, will be found upon careful examination to possess a nucleus consisting of oxalate of lime, and not unfrequently by the action of liquor potassæ well defined dumb-bell crystals may be obtained. These are insoluble in potash, and also in acetic acid. I have obtained from several specimens fragments of a mass larger than that represented in Fig. 55, and no doubt formed in the same manner. From recent analyses I have made I have been led to the conclusion that the dumb-bell crystals form the nucleus, around which the uric acid is deposited, more frequently than any other substance. I have not detected oxalate of lime in the centre of the small renal calculi composed of phosphate of lime which I have subjected to examination.

On the Relative Frequency of the Occurrence of the Different Calculi.

It is often very difficult to ascertain why certain varieties of calculi should be found in greater proportion in some parts of the country than in others. The question is one of great interest in connexion with the consideration of conditions under which the formation of urinary calculi occurs.

In the collection of calculi at Guy's Hospital the proportion composed of phosphate of lime is as 1:29; at Bartholomew's as 1:32¼; while in Norwich it is as 1:132 35; and in Bristol as 1:155. Of 230 pure uric acid calculi in different hospitals in England and on the continent, as many as 164 are contained in the Norwich collection. (See the tables in the appendix to Dr. Prout's work on *Stomach and Urinary Diseases.*) In the collection of urinary calculi in the museum of Guy's Hospital, it appears, from the statement of Dr. Golding Bird, that out of 208 calculi the *nucleus* consisted of uric acid in 127, of oxalate of lime in 47, of phosphates in 22, and of cystine in 11; or, of uric acid in 60 per cent., of oxalate of lime in 22 per cent., of phosphates in 10 per cent., and of cystine in 5 per cent. These figures are somewhat different to those given by Dr. Golding Bird, because I have thought it more correct to reckon in this calculation 142 calculi which were obtained from one individual as one.

Dr. Carter's observations on the composition of the calculi in the Grant Medical College, Bombay, prove that very few *nuclei* are composed of uric acid, while a large number consist of oxalate of lime. The following table, from Dr. Carter's paper, shows the per centage of calculi in India and in England entirely composed of uric acid, urate of ammonia, and oxalate of lime:—

	Grant Med. College. Per cent.	Coll. of Surgeons. Per cent.	Guy's Hospital. Per cent.	Norwich Hospital. Per cent.
Uric acid	3·3	32·92	15·38	24·73
Urate of ammonia .	5·0	2·15	3·84	8·29
Oxalate of lime . .	14·0	5·12	9·13	3·16

The following are the conclusions to which Dr. Carter has been led: "1. That, in the Bombay presidency, the proportion of calculi having oxalate of lime for their nucleus, or wholly composed of it, is about twice as great as in England, taking for comparison certain standard collections there. 2. That the proportion of calculi having uric acid, or a urate, for their nucleus or entire substance, is considerably less in India than in England; in the former, urate of ammonia calculi are somewhat more frequent than uric acid calculi; the opposite is the case in England. 3. That the number of calculi wholly composed of earthy phosphates, or having them for a nucleus, is proportionately much fewer in India than in England, the difference being chiefly owing to the rarity of the mixed phosphate in the former." (*An Account of the Calculi contained in the Grant Medical College Museum, with some General Remarks on Calculi in India.* By H. V. Carter, M.D.Lond., Assistant-Surgeon, Acting Curator of the Museum, Aug. 1859.)

It is, however, important to bear in mind that in the observations to which I have alluded, the central part of the calculus which is visible to the unaided eye is spoken of as the nucleus, while the real nucleus may be microscopic, and of a different composition to the material which immediately surrounds it. The nucleus of many calculi, which apparently consists of uric acid, is really composed of oxalate of lime, around which the uric acid has been deposited. This phosphatic calculus which I now show you (Fig. 59), seems to have a nucleus of uric acid about the size of an almond, but the latter contains in its centre a small nucleus consisting of oxalate, which can only be demonstrated by the microscope. Now the history of the formation of this is, probably, as follows: A number of dumb-bell crystals of oxalate of lime formed in the uriniferous tubes became aggregated together, and around this small mass uric acid was deposited as it lay in the tubes and pelvis of the kidney; then it passed down the ureter into the bladder, where the phosphate was deposited, and where it attained its present size. Now, the deposition of the phosphatic salts on the uric acid is not more dependent on the presence of the latter than the precipitation of the uric acid was consequent upon the presence of the oxalate. In all probability neither the phosphate nor the uric acid would have been precipitated had not the oxalate been present in the first instance. It is not too much to say that if the latter had not remained for some time in the uriniferous tubes and gradually increased in size, no calculus would have been formed in the present case; if, therefore, the collection of dumb-bell crystals had been washed out of the kidney soon after their formation by diluents, the further precipitation of calculous matter would have been entirely prevented.

It is important that we should make numerous observations on the nuclei of various calculi, and endeavour to determine their exact nature by microscopical investigation and by the application of chemical tests. In this inquiry you will find it advantageous to take the smallest calculi and examine them as soon as possible after they have been passed. After they have become dry, it is, in many cases, quite useless to attempt investigations on the nature of the nucleus.

[*To be continued.*]

Original Communications.

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Continued from p.* 915 *of volume for* 1860.]

Cod-Liver Oil. Perhaps there is no single medicine which, during the past half century, has met with more extensive trial, and so charmed both the profession and public, as the oil derived from the cod's liver; and although its employment has not always been followed with direct and immediate benefit in all cases in which it has been prescribed, still there is no doubt that it often proves a most valuable agent. In scrofula, in various forms, the use of this oil has long been cherished. Dr. Bennett, from the pages of whose interesting work (*A Treatise on Cod-Liver Oil:* J. H. Bennett, M.D., 1841) I have gathered much information, states, that this oil was used in Holland as a curative agent many years before it became familiar to the profession of this country; and it was only in 1822, a prize being offered by a learned society of Utrecht for the best essay on the chemical and therapeutical properties of the substance, that its truly wonderful efficacy in the treatment of tuberculous diseases was developed.

As I am mainly writing from my own individual experience, I feel bound to advance in an especial manner my own impressions regarding the value of the medicine. In all stages of tuberculous manifestations of the lymphatic glands, I have generally found the administration of the oil of decided benefit, provided a sufficient quantity has been taken; but in no stage of the disease is it of such advantage as when suppuration and ulceration have weakened and impoverished the irritated system. In the earliest forms of glandular implication from tuberculous exudation, a free and persistent use of the oil is very often attended with all the beneficial results which could be desired. When there is danger of ulceration and suppuration, by reason of the degeneration of the tuberculous material, the exhibition of the oil constantly acts favourably in preventing the occurrence of such untoward events. I could quote many cases illustrative of this point, and prove that, in all probability, the worst results would have followed the progressive advance of the disease had not the use of the oil been maintained for a considerable period; and, doubtless, similar instances could be collected from the practice of all surgeons.

Under a diligently pursued course, the effect on the suppurating tracts of the ulcerated cavities, which are found in connexion with the destroyed gland and the skin, is often marvellous; while disappointment occasionally occurs in its administration for the cure of less formidable mischief. Many are the theories that have been advanced regarding the way in which this valuable medicine acts upon the constitution. Dr. Bennett, who has so ably considered the subject, believes that "the *modus operandi* consists in stimulating the lymphatic glands and vessels, and by these means increasing the activity of the capillary system. By its action on the former, the process of assimilation is facilitated, and the appetite increased; the quality of the blood is thus improved; and so, lastly, the different organs and structures of the body become better nourished, and receive more *turgor vitalis.*" In whatever manner the oil acts, it is somewhat doubtful to which of its properties the good effects are traceable. There are some practitioners who believe that it is solely valuable on account of the iodine it naturally contains. This is evidently an erroneous impression, for much of the oil in everyday use contains scarcely a single trace of this valuable and efficient drug; and, moreover, it has been found that other oils, besides that obtained from the liver of the cod, are of advantage in the treatment of scrofula, although they have little or no iodine in combination. Some highly interesting observations have been made on the use of various oils in the treatment of tuberculous diseases by the late Dr. Theophilus Thompson. In his published *Lettsomian Lectures*, delivered before the Fellows of the Medical Society of London in 1855, Dr. Thompson recorded some extensive inquiries which he instituted regarding the relative value of many oils, such as sperm and seal oils, and those derived from the cod's liver, cocoa-nut, sunflower, neat'sfoot, etc. This gentleman believed that these various oils act by modifying the condition of the blood, and especially the condition of the granules which enrich the fluid, and dispose them to the calm progression of change, by which they are made to contribute to the production of healthy structure (p. 36). I have myself had but slight experience in the use of these various oils, having found that derived from the cod's liver so highly serviceable, and even for hospital purposes sufficiently cheap.

From Dr. Thompson's *brochure* I extract the analysis of four oils which are most frequently given in tuberculous disease, as furnished by Mr. Dugald Campbell:—

Ultimate Analysis of Oils.

	Carbon.	Hydrogen.	Nitrogen.	Oxygen.
Cod-liver oil	80.18	13.72	0.246	5.854
Neats'-foot oil ..	64.33	12.50	0.064	23.106
Cocoa-nut oil ..	69.62	12.49	0.060	17.830
Olive oil........	69.38	13.47	0.058	17.092

While partially agreeing in the opinion of so able a writer and observer, I cannot overlook the fact that the fatty properties of these oils have greatly to do with their value, as has been well advocated by Dr. Ascherson of Berlin. There can be no doubt that the digestive functions are rapidly amended by their use as an article of diet, independently of their therapeutical action; and that marked improvement oftentimes, I own, obtains in diseased glands and other organs when the assimilating processes are more harmoniously regulated. Dr. James Turnbull (in his *Inquiry into the Curability of Consumption*, 1859) states, that he believes cod-liver oil acts by promoting the solution of albuminous aliments in the stomach. Mr. Balnan, without advancing any special theory as to the action of this oil, came to the conclusion that it exercised little or no influence on the great majority of external glandular tumours; but that it is a most valuable and potent remedy in some forms and complications of disease (*op. cit.*, p. 158).

To avoid disappointment in the effects which are anticipated by a course of cod-liver oil, it is necessary to pay attention to various points. Firstly. What kind of oil is the most advantageous? Dr. Bennett says that "the best is the clear brown or reddish variety; next in power is the yellow; and the least beneficial is the white." It appears that the natives of Norway, and other northern countries, drink the very darkest that can be procured. Such, however, is most unpalatable, and its use in this country is seldom advocated. I have constantly used the yellow variety in the majority of hospital and poor cases of scrofulous disease which have come under my notice; but in private practice some difficulty is experienced in substituting this more efficient form for the less nauseating one, viz., the white, or lighter coloured.

All patients, young or old, in commencing a course of the oil, should begin by taking very small quantities, for otherwise the very first dose may upset the stomach, causing nausea and vomiting, thereby oftentimes creating a very natural though unfortunate dislike for it. I usually advise not more than a teaspoonful, or even half this quantity to be administered at first, once a-day, directly after a full meal. It may be disguised in any tincture, such as that of orange, or in wine, brandy, or milk, or with a sprinkle of salt. I believe, however, that the oil floated in a small quantity of water and quickly gulped is conveniently and tastelessly conveyed into the stomach; and in hospital practice I generally suggest this method in preference to others. When, however, the oil cannot be taken without producing nausea and a feeling of sickness, it may be administered in the form of an emulsion. I have frequently prescribed it in the following way:—

℞. Ol. jecoris ℥iv; pulv. tragac. co. ʒiv; creasoti ♏. ij; aq. anisi ad ℥xvj. M.

I write a tablespoonful for a dose, and find that by degrees a very considerable quantity can be taken without the production of any disagreeable sensation. Gradually the quantity may be increased, and taken twice or thrice during the twenty-four hours. It is not by any means uncommon after a time to find, instead of dislike, an actual craving for the oil; and I am aware of several instances in which very large quantities were taken with no unpalatable inconvenience over periods of six and ten years. There is a lady now at Margate, a patient under the care of my father, whom I have occasionally seen in consultation with him, and who for nearly eight years has daily taken the oil in considerable quantities with the most marked benefit; and I believe if it were discontinued she would at once rapidly decline, as she is the subject of vertebral disease accompanied with continual suppuration, the products of which find exit through the mouth, by reason, it is supposed, of a fistulous communication with the œsophagus. Care should always be observed in recommending the use of the oil; for, while sometimes its employment is fraught with direct advantage, at other times the distress it produces counteracts the good effects of other medicines; and in no instance should its continuance be pressed, if nausea, biliousness, and headache are produced. "The placid and phlegmatic bear it best"; while those suffering from fulness of habit are generally very susceptible of its irritating properties. Conjoined with other medicines it is often rendered doubly valuable, as a means of sustaining and improving an impoverished condition of system, although it may not always, as will be presently seen, exert a direct effect upon scrofulous or tuberculous manifestations of certain organs by virtue of any special property it contains. With iodine and iron, especially in the form of *syrupus ferri iodidi*, it is of great value, and thus conjoined is by many supposed to act very frequently as a specific in various kinds of disease. When the oil cannot be administered by the mouth, it is advisable to obtain its admission into the system by inunction. I have frequently pursued this plan, and with excellent results. The disagreeable smell arising from its outward use, may be much mitigated by the use of lavender and other scents. But it may occur that patients are unable either to swallow the oil or submit to its inunction. Under these circumstances, I am the habit of prescribing glycerine in drachm doses, which may be increased or decreased according to the fancy of the patient or his surgeon, and I have good reason to believe that it is no inefficient substitute.

Mineral Acids. In the treatment of tuberculous affections of the glands, the mineral acids are only so far of use as they are beneficial in keeping up the tone of the system, creating appetite, and arresting sweating, which is such a frequent and weakening accompaniment of the advanced stages of phthisis.

Vegetable Tonics and Bitters. In the year 1755, Dr. John Fordyce introduced the use of cinchona as a *specific* for scrofula, and was soon followed in his high opinions of the medicine by Dr. John Fothergill, and Dr. Bond of Philadelphia. Subsequent experience shows, however, that it is only of advantage in giving tone to the stomach, and thus improving the appetite, and allowing improved nutrition and assimilation. Dr. Henning, who had much experience in the administration of the medicine, says, that "the proper time for the exhibition of the bark is when suppuration has taken place in a scrofulous gland, and previously to the discharge of its contents." Quinine, and various bitter infusions, are of utility in the same way; for, as scrofulous and tuberculous diseases are mainly due to departure from health, etc., so any substance that tends to promote the more harmonious action of an organ is of direct advantage.

Conium or Hemlock was recommended by Dr. Störck of Vienna, as a remedy in scrofula, and particularly in tuberculous disease of the lymphatic system; but it is very doubtful if it exercises any special effect on the amelioration or cure of the disease. It is, however, of advantage when combined with certain medicines, which, given alone, cause irritation of the stomach and bowels; and it is in this way that I have alone found it of value, although so high an authority as Sir C. Scudamore has recommended its use in phthisis.

Purgative Medicines. With the ancient writers on scrofula, purging freely by means of medicines was thought highly advantageous, as it procured the elimination of the irritating material which originated the development of the disease. Such a doctrine is now no longer upheld; and, instead of distressing the already debilitated constitution by the exhibition of purgatives, we are careful to husband the powers already weakened, although, as before mentioned, it is especially necessary to attend to the due regulation of the bowels. I have already detailed the plan I am in the habit of adopting to procure this end, and have fully adverted to the importance of so doing.

Baths. Baths of various kinds have, from an early period, received the sanction of many excellent practitioners. Tepid and cold baths are of use in glandular disease, by giving tone to the system and ensuring cleanliness and healthy action of the cutaneous surface. Saltwater immersion, as previously observed, is serviceable in inducing the same ends; but it is not, as far as my observations extend, always of specific advantage. It is astonishing oftentimes, however, to see what rapid benefit is obtained by a course of saltwater (sea) bathing. Suppurating tracts soon contract and heal, and chronic purulent discharges quickly diminish. The appetite and general tone of the system improves, and in this way the scrofulous lesions sooner vanish, or altogether heal. So convinced of this fact are we at Margate, that all scrofulous patients, provided no contraindications exist, enjoy the frequent advantage of the saltwater bath. I have oftentimes contrasted the results of cases of glandular tuberculous mischief treated with and without the use of saltwater bathing, and I am convinced that whatever the exact virtue of the bath may be, it is, generally speaking, of great advantage in the treatment of tuberculous manifestations of the lymphatic system. In the use of baths of iodine, bromine, etc., I have had but little or no personal experience, and must therefore be brief in my notice of their effects in glandular tuberculosis.

Both MM. Lugol and Baudelocque speak very highly of their effects in the treatment of abscesses and disease of the osseous system; and it is well known that many waters, such as those of Kreuznach, which contain bromine, are of especial advantage in causing diminution of hypertrophied glands, and promoting the cessation of suppuration and cicatrisation of tuberculous cavities. When I was lately at Aix-la-Chapelle, Dr. Diemer informed me, that the amendment which followed the use of the baths and waters which contained iodine or bromine was generally very marked; but that it was always of the highest importance to regulate their administration, as many constitutions, instead of being improved, were sensibly disordered by them.

The various medicines which are of most advantage in the general treatment of tuberculous disease of the glands having been briefly reviewed, it may be well to consider how the individual phases of diseased action may be combated by them.

In the incipient stage of advancing tuberculosis, or when simple enlargement, inflammatory or irritative hypertrophy, has obtained, the administration of cod-liver oil and iodine will, as a rule, be accompanied with most benefit, especially when due attention is paid to the proper regulation of the digestive organs. In addition, good and nutritious regimen, and, if possible, a seaside residence, will be of the greatest benefit. I am urgent on this point, because I have so often seen the rapid amendment that takes place in many of the poor scrofulous children who, year after year, are admitted into the Children's Hospital at Margate. As soon as the exciting cause of the mischief is lessened or entirely removed, there is great probability of the glandular mischief subsiding; and although it would be very difficult to point out what has been the exact nature of the hypertrophy in every instance, still there generally coexists sufficient evidence to show that, in great probability, it was dependent on advancing tuberculosis. In nearly one hundred and fifty cases which I have collected of tuberculous glands in various stages, or cases which appeared to be of such a nature, more than one-third never arrived at that stage in which there was clearly evinced a positive deposition of tubercle, but under suitable treatment subsided, or nearly so, the constitutional powers having been improved and supported. No fixed rule can be laid down whereby to direct the management in all cases; but when the use of iodine and cod-liver oil is indicated, it will be expedient to pursue a gentle and tolerant use of the medicines. When a gland or series of glands are really invaded by tuberculous exudation, considerable skill is required in selecting a correct therapeutical treatment. How far iodine is useful at this stage, *i. e.* before softening and suppuration have commenced, is a question open to grave discussion; but if the evidence of practical and inquiring surgeons is to be believed, it is probable that the good effects of this valuable drug are oftentimes overrated.

M. Baudelocque has quoted cases of tuberculous glands which have been cured at this stage by means of iodine; but I have reason to suspect that the actual deposition of tubercle was by no means clearly ascertained in every instance. M. Lebert says, his experience is not favourable to the utility of iodine in this affection of the glands; for during a period of ten years wherein he steadfastly used the medicine, he failed to obtain satisfactory evidence of the absorption of the tuberculous exudation. Long before I was conversant with this opinion of so distinguished a surgeon, I tried in many instances the effect of iodine, internally administered, on tuberculous disease of the glands, and arrived at a somewhat similar conclusion, which future experience corroborated, although it appeared, after all I had heard regarding the wonderful properties of the drug, to be somewhat immature. The diminution which certainly obtains after a persistent use of iodine, in many cases of apparently tuberculous glands, is dependent on the absorption of the plastic material which has followed any inflammatory disturbance. But I am loth to speak too precisely on this point, as it is one that is open to much discussion. If iodine, however, do work such positive cure of tuberculous glands by promoting or obtaining absorption of the tuberculous exudation, how is it that so many instances of undoubted tuberculous glandular implications do not subside, or even remain in *statu quo*, instead of advancing to suppuration? How is it that in 132 cases of carefully tabulated tuberculous disease of the cervical glands, 82 passed into suppuration, and that only the remaining 50 completely or even partially escaped, although they had received the advantages of treatment? I believe further attention to this point, in the consideration of the real value of iodine, will prove of great practical importance. Past experience has already placed me on my guard against promising too much from a persistent course of the medicine, even in favourable cases, as its action has oftentimes shown itself in a very uncertain way. Much benefit has been said to arise from use of cod-liver oil in this stage of the disease; but I am somewhat doubtful as to the virtue of the medicine in directly influencing the disappearance of tuberculous exudation. Its administration is certainly advantageous; but I cannot see that it exerts any specific action on an affected gland, save that which may be produced by maintaining the remaining portion of the absorbent system in as healthy a state as possible, and thus guarding against future similar implications. The same observations are applicable to all kinds of tonic medicines, such as iron, quinine, the mineral acids, vegetable infusions, etc.; for they are devoid, as far as is known at present, of any special influence in tuberculous deposits.

It is questionable to what extent mercurial preparations affect a gland involved in the way we are considering. I believe that the exhibition of mercury, with the view of directly affecting the glandular system, is not to be encouraged; for even admitting that the local disturbance may thereby be benefited, it is more than probable that a serious amount of damage may be inflicted on the constitution. As already stated, I seldom or never give mercurial preparations in scrofulous disease of the glands, with the view of placing the absorbent system under their influence, unless certain complications point to their advantageous use. The salts of lime, especially the hypophosphite combined with iron, as the syrup of the phosphate of iron and lime, may be administered with much advantage. It is impossible to say to what exact extent the exhibition of lime influences the condition of tuberculous exudation in the glandular system. I believe, from the good results I have seen, that it often enables resolution to proceed with greater rapidity; but whether it is directly instrumental in affecting a cretaceous metamorphosis, I am not prepared to say; and till further experience shall show in what special way it is of value, I think we must be content to prescribe it in partial ignorance of its exact action. When softening and liquefaction have commenced, they are due to the destructive degeneration of the tuberculous exudation. To support the tone of the entire system is the aim of the surgeon. It is more than doubtful that any medicine, exhibited with a special view of procuring resolution without suppuration, will be of any avail without due attention be paid to the general health. It is usual to stock the system with iodine, and to apply it locally, as will be presently mentioned, under the impression that disintegration and softening with liquefaction having taken place, absorption will rapidly remove the altered tuberculous matter. My own opinion is, that a destructive, or what may often be viewed as a curative, process having advanced to a certain point, ulceration of the covering integuments will, generally speaking speedily obtain, so as to give exit to the pent-up material. It may be that absorption will remove the liquid and least effete portion of the altered tubercle, and leave the solid part to undergo such changes as were described when considering the pathological metamorphosis of tuberculous exudations. Some authors are inclined to believe that such a process frequently occurs; and that a residue of comparatively inert, changed, tuberculous matter remains, keeping the affected gland still increased in size, though in a harmless condition. If such changes can be assisted by art, it is certainly advisable to make use of those means which would most materially aid nature in her curative endeavours. With this view, iodine or bromine may be administered, and from M. Baudelocque's experience it would appear that such treatment is often of avail. I I am somewhat reserved on this point, because I have failed as yet to obtain any very definite results as to the influence of iodine in producing effects which we know do sometimes take place. Lime-salts, with cod-liver oil and iron, I believe, are important adjuncts in the treatment, although it is doubtful to what extent they are directly useful, and in what manner they exercise any influence over the conditions of the tuberculous alterations.

When suppuration of the gland and ulceration of the integument have fairly set in, notwithstanding the most skilful treatment may have been adopted from the earliest manifestation of diseased action, it becomes advisable to use such medicinal and dietetic means as belong to the art of physic. To support the constitutional powers, which are further distressed by the destructive process which is taking place, is the first call to which the surgeon has to respond. Cod-liver oil, glycerine, iron, quinine, and the salts of lime, with the mineral acids, will ordinarily be found of most avail. If the patient be young, and many glands, as is very commonly the case, be implicated, it will be necessary to support the system by nutritious diet. Milk, eggs, and meat, combined with jelly, and a certain amount of alcoholic stimulus, and ale or porter, will form the best diet scale. I have found a certain flour, made by Messrs. Brown and Polson, of great advantage as an article of food for young children, who will frequently take it when the fancy refuses ordinary viands. The *Semola*, made by Mr. Bullock of Hanover Street, and the *Tous les Mois*, imported by Mr. Fincham of Baker Street, will likewise be found most valuable as a variety in the diet-scale of youthful patients. Should sweating and general languor be present, the mineral acids will be of great use, especially if combined with iron. When the discharge becomes more chronic, and the lips of the ulcerations thicken, and present their peculiar bluish-purple colour, the administration of iodine is often accompanied with great benefit. I have known many such ulcerations heal kindly under a judiciously prescribed course of iodine when they have resisted other treatment. The great aim, however, of the practitioner is to support the general health, and then the local means of treatment, presently to be adverted to, will meet with a fair amount of success.

[*To be continued.*]

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

V.—Operations on the Eye.

[*Continued from p.* 34.]

Case ccxxxix. F., aged 78. I extracted the cataract from the right eye, although she still had useful sight in the left. She recovered well, and has at the present time (four years after the operation) very good sight. The cataract in the left eye appeared, at the time of the operation, to be progressing rapidly, but at the present time it is very little more advanced than it was then.

Case ccxl. M., aged 68. I operated on both eyes, and he recovered speedily, union taking place in both corneæ by the first intention. He had circular clear pupils and good sight in each.

Case ccxli. F., aged 74. I operated on the right eye. It was not a favourable case, the eye being much sunk. She recovered with good sight.

Case ccxlii. F., aged 65. I operated on the left eye, and she recovered speedily, with excellent sight.

Case ccxliii. M., aged 58. I operated on the left eye; went home shortly with good sight.

Case ccxliv. F., aged 81, a very feeble and low spirited old woman, suffering from religious melancholy, with fully formed cataracts, but very sunken eyes. I operated on the right eye, and extracted a hard lens. She complained of obscure pain in the brow during her recovery, and when I could examine the eye I found the pupil closed. Six months afterwards I made a cut with the iris knife, and a small pupil was formed. She always declared that her sight was no better; but she walked about her house without stumbling against a chair or table, and when driving out could see the buildings, for she knew whereabout she was. She was provided with glasses, which she used constantly, always persisting that she was blind. I believe she had fair sight.

Case ccxlv. F., aged 68. I operated on the left eye, and she recovered speedily and has seen well ever since.

Case ccxlvi. M., aged 71. I operated on the right eye and extracted the cataract, and he went home in a short time with a weak eye, some prolapsus of the iris, and but little sight.

Nine months afterwards I saw him, and he had a closed pupil, and I therefore incised the iris with the iris knife with the effect of enabling him to see much better for a few days, but as his sight became more dim I removed a portion of iris, and at the fourth and last operation I dislodged a piece of opaque capsule, so that ultimately he went home with good sight.

Case ccxlvii. M., aged 61. The cataract in his left eye followed a blow sixteen years before his admission, and the right eye had become more recently blind. I made a lower section in the left eye, but owing to the toughness of the capsule could not break it with the curette. The lens was extracted with much difficulty, and he went home with but little sight, returning in the course of a year with the vision improved but the pupil excessively minute. I touched it across with the iris knife, and a central, black, and tolerably circular pupil suddenly appeared and he saw well.

Case ccxlviii. M., aged 72, had undergone extraction and the formation of artificial pupil in London without any success. I operated on the left eye, and he recovered with excellent sight. He had dull pains round his brow during his recovery, and I blistered him freely, and when he was quite well his pupil was small and irregular, and I believe that iritis had been going on, and that seems to have been the disease which had destroyed the sight in the other eye. He sees well to the present day, nearly three years after the operation.

Case ccxlix. M., aged 57. The cataract in the left eye was deeply seated, and had been coming on four years. The right eye was blind from closed pupil and old internal inflammation. I operated on the left, and he recovered speedily, but had very imperfect sight, for opaque capsule obstructed the pupil. I tried to remove it with the cannula forceps, but in vain, and two weeks afterwards I broke the capsule across with a needle through the sclerotic, and he went home with a circular pupil and good sight.

Case ccl. M., aged 58. I extracted the lens of the left eye, and he recovered with improved vision, but a portion of opaque matter remained in the pupil; this was removed, and he went home with good sight.

Case ccli. M., aged 59. I operated on the right eye, and made the upper section, and when the capsule had been ruptured a quantity of vitreous humour and small portions of the lens suddenly gushed out. The corneal flap fell down, and the lens itself disappeared from view. I let the patient sit quietly on one side while I operated upon a squint case, and when I examined him again the lens was presenting at the pupil, and was easily removed. A very large quantity of vitreous humour had escaped. He recovered in a week, and had good sight.

Case cclii. M., aged 43, with remarkably full and prominent eyes and very thin corneæ. I extracted the right cataract, and he went on well until the fifth day, when he accidentally touched his eye and it ran with water considerably. He recovered well and has still very good sight.

Case ccliii. M., aged 68. I operated on the left eye by lower section, and a little fluid vitreous humour escaped. He recovered excellent vision, and could see to read well, but the pupil was slightly drawn down. The next year he came down again, and I operated on the right eye by an upper section, and he recovered excellent sight with this also.

Case ccliv. M., aged 45. I operated on the right eye without accident, and he received very good sight.

Case cclv. M., aged 60. I operated on the left eye, removing some *débris* from the pupil after the lens had escaped. He had an attack of iritis on the ninth day, which was treated with blisters, and calomel and opium, and he went home, after five weeks confinement, with good sight. His sight cleared as he became affected by the mercury.

Case cclvi. F., aged 76. I operated on the left eye, and immediately afterwards Mr. Leonard operated on the right, and she recovered excellent sight.

Case cclvii. F., aged 57. I operated on the right eye. The corneal flap was rather disposed to fall down. She recovered with fair sight.

Case cclviii. F., aged 65. I extracted the cataract from the right eye, and it was followed by a little clear vitreous humour. She went on well, and, after a tedious convalescence, recovered her sight.

Case cclix. M., aged 86 last birthday, lost his sight in his left eye a few years before from a blow, and cataract had gradually formed in the other. This was an extraordinary old man, who had lived as a hermit all his life, studying botany, astronomy, and mathematics; so suspicious of mankind that no one was allowed to enter his house. He cooked his own food, even when he was blind and 85 years old, and when he was able to walk about he carried his purchases home in his umbrella. He probably knows more of optics, astronomy, and mathematics, than any one in this neighbourhood, and the loss of his only eye was, perhaps, even more distressing than to most. He had a little eye, sunk, and very prominent eyebrows, and it was a very unpromising case, but the helpless condition of the old man induced me to give him a trial. I extracted the cataract in the right eye, and he recovered his sight, and now (nearly two years after the operation) he can see to walk about everywhere and to read a little. Since the restoration of his sight he has also improved wonderfully in his health, and can walk some miles and attend to his own affairs.

Case cclx. M., aged 56. I operated on the left eye, making the lower section. He recovered speedily, and sees to read and write now without difficulty.

Case cclxi. M., aged 63. I operated on the left eye, and extracted a large flat amber lens. On the seventh day his eye was strong and he had excellent sight.

Case cclxii. M., aged 55. I operated on the right eye, and extracted the cataract through a small upper section. *Débris* of the lens had to be removed from the pupil. Inflammation followed, brought on, apparently, by cold and diarrhœa, and he went home with closed pupil.

Nearly two years afterwards I made a cut in his iris with the iris knife, but it was insufficient; and, therefore, after waiting a few days, I operated again, making a section in the cornea, and drawing out some of the iris with a hook, and then I introduced the cannula forceps and drew out a piece of capsule. He went home with very good sight, with a four inch lens.

Case cclxiii. F., aged 56. I operated on the right eye by the upper section. She made a good recovery from the operation, but some opaque matter filled the pupil and interfered with vision, and thinking it was capsule I introduced a needle to depress it, but it turned out to be quite soft. After stirring it about it was soon absorbed, and she recovered with excellent sight, and is now able to see to read and write. The cataracts in this case were recent.

Case cclxiv. F., aged 76, an active little old woman. I extracted first the left and then the right cataract. In making the corneal section in the right eye the globe rolled inwards, and the point of the knife caught the conjunctiva and the aqueous humour rushed out of the anterior chamber into the cellular tissue between the conjunctiva and sclerotic, and a complete chemosis was suddenly produced. She recovered with excellent sight with both eyes in a very few days.

Case cclxv. F., aged 73. I made the lower section in the left eye, and completed it with a little difficulty, owing to pressure made by the finger of my assistant. She was a stout woman, subject to headache. I applied belladonna to the brow, and gave her several doses of cathartic mixture, and she recovered and has very good sight.

Case ccxlvi. F., aged 73. I extracted both cataracts without difficulty, and within a week she opened them both and saw well, and in a few days went home with excellent and strong sight.

Case cclxvii. M., aged 52. The cataract in the right eye was irregularly opaque. I extracted it, and it came out enveloped in the capsule, which had the opaque spot upon its upper part. Some vitreous humour flowed out also. His eye was much inflamed for some time, but he ultimately recovered. I have not recorded the exact condition of his sight.

Case cclxviii. M., aged 45. I operated on the right eye. Some soft flocculent matter remained in the pupil after the escape of the lens, and this I removed with the curette. He recovered well and has excellent sight. On examining his eye it would not be possible to say that anything had been done to it.

Case cclxix. F., aged 46. I operated on the right eye. After making the corneal section and rupturing the capsule the lens escaped in two distinct portions, and there was a free flow of vitreous humour, so that the eye looked quite collapsed. She recovered in about ten days with good sight.

Case cclxx. F., aged 44. I had operated upon this patient's left eye with a needle a year before the date of the extraction of the cataract in the right, breaking up the anterior capsule and surface of the lens with a needle, and on an after occasion I depressed a portion of capsule, and at a third operation I removed some with the cannula-forceps, and after all she recovered very good sight. I extracted the cataract from the right eye, and she recovered speedily, and she now has excellent sight in both eyes, being able to read and write and sew well.

Case cclxxi. M., aged 72, had only one eye (the right), and from this I extracted the cataract by an upper section. After the lens had emerged from the pupil some flocculent matter remained. This was removed with the curette, and the pupil became black and clear. He recovered speedily, and had good sight.

Case cclxxii. F., aged 60. I extracted the right lens by the upper section, and a little vitreous humour escaped at the same time. She did well.

Case cclxxiii. M., aged 55. His left eye had been operated on by Mr. Estlin many years ago with the needle, and with but poor success. The right very gradually became dim, and the amount of blindness scarcely corresponded to the slight amount of dulness of the lens. I extracted the cataract from this eye, and at a subsequent occasion I removed some opaque capsule with the cannula-forceps. He recovered sight enough to walk about alone, and by looking through a small slit in a card he could see fairly.

Case cclxxiv. F., aged 77. I operated on the right eye and cut through a very marked arcus senilis. She went on well for a time, but some inflammation ensued, and the cornea became opaque above where the incision was, and the pupil was drawn up. I divided the iris with the iris knife, and in a few days after the blood effused in the anterior chamber had been absorbed she began to see better, and she could distinguish the things in her room and see to get about.

[*To be continued.*]

Reviews and Notices.

The Composition of the Urine in Health and Disease, and under the Action of Remedies. By Edmund A. Parkes, M.D., F.R.C.P., Professor of Hygiene in the Army Medical School. Pp. 404. London: Churchill. 1860.

Some quarter of a century ago, as scientific records tell, and as many of us can remember, animal chemistry took a sudden start into vigorous existence, and became one of the most welcome of handmaids to the physician and the physiologist. Liebig's fascinating formulæ promised to open a new epoch for the practitioner of medicine; and, at the same time, the then strange and cruel experiments of the famous physiological Professor of the College of France gave us curious insights into diseased processes. Thus the chemist and the physiologist were at work in this hoped-for regeneration of medicine; and so also was the practitioner of medicine in the wards of La Charité—anxious to turn to practical account the new lights projected by the skill of the chemist and the physiologist. In these days, the blood—*la chair coulante*—the vivifying fluid of the body, was the subject of all these profound and enthusiastic studies. It was the source of life, and men thought to find in it the sources of disease also, and, judging by the *plus* or *minus* of its constituents, to supply or subtract, accordingly, the needed or the superfluous article. Here was truly a charming prospect opening on the dark and empirical ages of medicine. Given diseases were fitted to given states of the blood; and, in fact, in these abnormal states of the blood was to be discovered the solution of diseased processes, and their appropriate remedies.

But this happy period of hope was not a lasting one. The fluidists were triumphant only for a short day. They found failures in the practice which they based upon their seductive theory, and defects in the theory itself; and were at length forced away from their position of security by the revealments of that great teacher and rectifier of medical errors—experience. It is painful, and not altogether satisfactory, to look back to that little episode of medical history, and to note how little it taught us, *in a positive sense*, either of the essence of diseases or of the remedies appropriate to their cure. What it did for us was—and this, indeed, was much—it removed many of the thick errors which had been theretofore overweighting and obscuring the science of medicine; but it did not tell us what diseases were, nor bring us any new weapons with which to attack morbific processes. Rapidly theorising on the facts thus opened before them, men rushed too hastily to the deduction of practical conclusions; and thus, indeed, from the very light obtained, spread fresh errors into the path of medicine.

If we refer thus to the modern history of the chemistry of the blood, it is that we may draw a word of moral—a little useful caution—from the tale, for the benefit of the zealous zoochemical and physiological physicians of this present hour. The attention which the blood, the vital fluid, then received, is now concentrated upon an excretion of it—upon the urine—as though from it we may win the history of diseases, and deduce the methods appropriate to their cure. We trust we are not misunderstood. We desire not to damp the ardour of such studies. We know them, indeed, to be absolutely necessary as parts of a scientific knowledge of medicine. But we want to put in a word of caution against those hasty practical conclusions, into which we are so apt to fall when we have chemistry as our guide in the inductive processes which we reason out and apply to this vital body. We fear we must for many a long day yet, notwithstanding all our great discoveries in this direction, be contented to labour merely as gatherers of knowledge; and that an immense stock of facts has yet to be acquired before we can hope for the deduction of any effective practical generalisations from the accumulated mass, and their application usefully to the treatment of disease.

We need not remind our readers of the many philosophic works which have during these last few years made the chemistry of the urine, in some sort, the general study of all of us. One excellent work has just been added to the list. We need hardly say that we refer to the volume of Dr. Parkes, and we are glad to see that he admits the necessity of the caution we here indicate; for in his preface he tells us, for instance, that without a knowledge of the other secretions of the respiratory and the cutaneous secretions, the chemistry of the urine loses half its value. He himself has, it is true, endeavoured, as far as may be, to supply this defect; and he is exceptional, we believe, in this respect, but he discovers, in doing so, his true philosophic mind.

His intention is, indeed, and we most sincerely trust the occasion will serve him in the intention, to enumerate, in a second volume, the excretions from the skin, the lungs, and the intestines; and in a third volume (having thus prepared himself for the high task), to consider that dark corner of our pathological being, the nature of the tissue-changes which lead to alterations in the excretions. Let us all, in our eagerness to snatch at hints of indications for the application of remedies to diseases, take a lesson from this philosophical programme of Dr. Parkes. He knows and admits, that a world of facts has yet to be accumulated and co-related before any true deductions can be drawn from them.

This volume, therefore, deals only with one section of the human excretions—with the urine. It gives an abstract of the many observations made on the human urine by various observers during late years—in fact, tells us what is the composition of the urine (as far as science has yet informed us) in health and in disease, and under the action of certain remedies. Of course, such a work is composed, not of any theory or opinions, but of a mass of details; and it would, therefore, be quite beyond our power to attempt any enumeration of such details. This, however, we can truly say of the conception and spirit of the work, that they are, in our opinion, perfect. We very much doubt whether any observer of the day could produce a more thoroughly honest and philosophic enumeration of the very numerous facts which refer to the condition of the urine in health and in disease, and which have required to be dealt with here. Every fact recorded has also been conscientiously traced to its author by appropriate quotation of the work from whence it was derived; and we may say, that this reference to authorities forms a very valuable item in the volume.

The first part of the volume gives us an account of the constituents of the healthy urine, and of the variations which this excretion is found to present in health in its physiological conditions, such as sex, age, weight, etc. The effects of different kinds of food on the urine are also here treated of; the effects of liquids; of fasting; of exercise; sleep; and, in fact, of most of the physical agencies which exert their influence on the body human, male or female. We shall take another occasion of more fully pointing out, for the benefit of our readers, what views this chemical study of the urine would lead us to take of the value of certain dietetic agents—of alcohol, for example—facts every way of the highest interest to all mankind.

Then, again, in this part of the work, we find an interesting and full account of the effects—that is, the variations—produced in the urine during health by the use of medicinal agents, by inhalations of various sorts, by applications to the skin, injections into the intestines, and by substances taken by the mouth. Some idea of the amount of information here given may be gathered from the fact that Dr. Parkes, under this head, gives the separate effects of almost one hundred medicinal agents.

In the second book, the urine in disease is treated of. First, its abnormal constituents are detailed, and its sediments; then its condition in acute diseases (not renal); its condition in chronic (non-renal) diseases; and lastly, its condition in renal diseases.

Such are, in brief, the contents of this volume. We have already given our opinion as to the manner in which its author has worked out the extensive details which he has had to deal with. He has probably left little unsaid upon the subject which is worthy of being recorded, and has thus brought this study of the urine in disease before us, with all the latest facts attached to it. More especially, however, and, in concluding this notice, we would point to one other valuable quality in this work; and that is, the cautious and practical spirit in which the author discusses the value of the opposite or different conclusions which different observers have arrived at concerning the nature of the changes occurring in the urine and their causes.

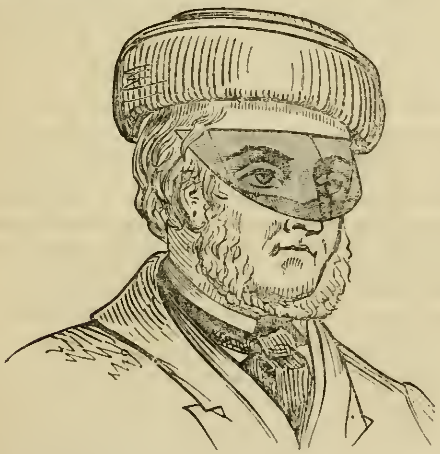
NATURE IN THE CURE OF DISEASE. A Lecture. By J. STRACHAN, M.D. 1861. Pp. 32

WE have read this lecture with pleasure. It is the production of a well-read and a sensible practitioner of our art. He has pointed out one of the greatest difficulties which an honourable man has to contend with in the practice of medicine—it is the gross ignorance of his patients respecting the powers which medicine possesses over disease. A physician who dealt out simple truth to his patients would, probably, very soon cease to have any patients to deal with. The quack thrives on the crass ignorance of the public, and on their love of being cheated, provided it be in the direction which suits their wishes. We are accused by the homœoquacks, and less enlightened people of that class, of dealing in fearful polypharmacy with our patients; but the truth is, in nine cases out of ten, it is the patient who demands these many remedies. He wishes to feel that something is being done for him. He cannot, in any case, understand that the quiet, unseen, all-powerful, operations of Nature are sufficient to work his cure. Still less can he bear to be told that for his disease neither nature nor art has any cure. Here it is, indeed, in the incurable class of maladies, that the quack most gloriously revels. He is at home in the business of curing incurable diseases. And in one other class of affections he also shines, and that is in affections of the imagination—where no disease at all exists. We must not, however, be too hard upon human nature. It is natural enough for one who is condemned to die of cancer to rush into the open arms of the first boastful scoundrel who has the effontery to promise a certain cure. To tell a patient you can do nothing for him is almost sure to drive him into the hands of those who advertise their lying promises of successful treatment. We can hope for no great change in this state of things until the high academies of the country teach the ingenious minds of their disciples, and learn themselves, something about the laws of animal bodies. The quackeries of the country, whether medical or otherwise, are mainly patronised by what are called the *educated* classes—a fact which may be fairly ascribed (as it once was by Faraday) to the want of a proper instruction of these classes in the physical laws of the universe. It requires some degree of courage to boast of the highly advanced state of the human mind, when we find from one end of the country to the other reverend gentlemen—highly educated Oxonians and Cantabs — performing all kinds of mountebank tricks in the spirit-rapping line, or mesmeric subtleties, or the administration of globulistic atoms; and continually putting themselves in opposition to us as curers of disease. It makes one almost think that we are falling back into the middle of the dark ages, when we find one of our great modern moral teachers (as he is thought) admitting into his magazine tales of second sight, and wonderful displays of the medium flight through the air. Is this all pandering to the degraded appetite of the public, or can it be that the moral teacher himself believes what he here scatters wide through the world to the injury of thousands of weak minds?

Inventions and Appliances
IN
MEDICINE AND SURGERY.

CALKIN'S OCCHIOMBRA; OR, PATENT TRANSPARENT EYE-SHADE.

THIS little instrument, made of well-tempered spring and silk gauze, forms a complete protection for both eyes, without heating them or confining their motions in any way. Neither is there any uncomfortable weight or pressure upon the lids or adjacent parts, such as is experienced from all the varieties of spectacles employed as protectors against dust, cold air, etc.



A A, a spring fitting closely round the forehead, just above the eyebrows and a portion of the head.
B B, another portion of the framework, slightly in advance of A A, leaving an open space between the two for the free escape of generated heat, also supporting the fabric of gauze, or other material, to D D.
C C, Another portion of the framework, of flexible material, resting on the nose, and taking the shape of the face, under the eyes, to the right and left temples, supporting the fabric from D D, and forming the closed chamber.
D D, the portion of the framework which constitutes the external outline of the shade, assisting to support the fabric.

As a shade for the eyes after surgical operations, during inflammations and other affections, for all purposes, in short, of affording protection to the eye, as against glare and dust in travelling, for example, we have seen nothing so efficient, while its cheapness is equally notable, and forms an additional recommendation.

British Medical Journal.

SATURDAY, JANUARY 19TH, 1861.

[THE over candid attentions of our critical friends have been the cause of introducing into the minds of many of our readers, and even of some of our members, a certain degree of misapprehension concerning one particular side of this JOURNAL. We think, in justice to ourselves and to the Association, that this stalking horse of a *mal-entendu* should be quietly disposed of. We appear every seventh day contemporaneously with other weekly journals; and naturally enough we have, in consequence, to hold our own in the presence of those fellow potential agents. It is not for us to judge whether our light is kept well burning, whether we supply our readers with a proper and sufficient digest of the spirit of the medical times in which we live, and properly sustain the position and honour of our profession. This must be left to others. We have, however, our own opinion upon the subject; and the very comparison which we are now inviting proves that we have no fear of criticism in this direction. But what we desire now to bring prominently forward is this: that those who judge us should take into consideration all the elements required for the delivery of a fair judgment. We beg then to inform our critics, and those of our friends who are ignorant of the fact, that the price of the stamped BRITISH MEDICAL JOURNAL, as delivered to each Associate, is just a fraction over one-half the price of the other weekly journals. The price, in fact, paid by each Associate for his stamped JOURNAL is about 4¼d. per number; the price paid for the other stamped journals which appear with it is 8d. per number. It is true, that these journals give their readers a larger quantity of matter—somewhere about 26 pages to 21 pages of equal size of the JOURNAL. These facts require no comment. All we desire is that they should be known.]

THE BATTLE OF THE COLLEGES AND THE UNIVERSITY.

THE University of Edinburgh and the Colleges of Physicians and Surgeons of Edinburgh have griefs which they cannot settle amicably, nor settle at all in Scotland. They have, therefore, by their respective representatives, presented themselves this week before the Privy Council to seek a solution of their difficulties. The tale of the differences between these bodies is, as we understand it, both amusing and instructive. It runs somewhat as follows. We may be excused if we fall into any small error in detail, considering that the affair comes from over the Borders.

The Colleges of Physicians and Surgeons (Scotch) being wise in their generation, and not indisposed to gather the sweets of successful licensing, last year entered into a joint compact to grant degrees in medicine and surgery, and thereby to turn out, fitted for the practice of their art, well finished practitioners, armed at all points, and ready to do justice upon diseases, medical or surgical. This combination rather took the wind out of the sails of the old University; and especially so, because, as all the world now know extremely well, the Licentiates of the College of Physicians of Edinburgh, in pocketing its license, assume the right of donning the cap of the Doctor too; for, as they argue to their complete satisfaction, how can a man who is a physician not be a doctor? "We are licensed physicians; *certes*, therefore, we are doctors also; and, being doctors, we must, perforce, have the unwritten privilege of taking the title of Doctor." Such was the logic which led to this practical conclusion. The College authorities looked on with a silent smile of approbation. The University was thus struck between the ribs—in fact, wounded in a very vital quarter. The wisdom of medical mankind had discovered how to become a doctor without paying for a doctor's diploma; and had also invented a readier, cheaper, and more consolidated method of becoming learned in and licensed for the practice of medicine and surgery, than the old duplicated methods afforded. The University, therefore, was driven to reflect, and it retrospected and prospected, and at last discovered a means by which it might come up with its smart competitors. It resolved to grant a diploma or certificate of capacity in surgery, as well as a diploma in medicine, to its full-grown alumni. This was a difficult and unpleasant nut for the Colleges to digest—so indigestible, in fact, that they resolved to call in the law to aid their defective powers. "You," they suggested (under the influence of legal wit) to the University, "have no power to let loose surgeons on Her Majesty's subjects." "Indeed, but we have," was the reply. "Ask *our* lawyers." Hereupon issue joined, preliminaries entered in Edinburgh, and adjournment to Privy Council in London.

Now, the question for decision is a very curious one, albeit expensive. A vast deal of ancient learning requires to be raked up, and the definitions of old terms warmly canvassed and decided. The University's claim rests on curious grounds, and (what will our Scotch friends say?) back to Pope Alexander the Sixth it leads them! In 1496, that Pope issued a bull in favour of King's College, Aberdeen, and authorised it to give instructions "in theology, in canon and civil law, in medicine, in the liberal arts, and in every other lawful faculty; and to confer on deserving persons the degrees of bachelor, licentiate, doctor, master, and every other degree or honourable distinction, with full power and liberty to the persons so promoted, to read, teach, and exercise all those things, whatsoever the persons promoted to the same degrees within the University of Paris, in the University of Bologna, or any other university whatsoever, may do or exercise." Then comes King James VI of Scotland, and founds the University of Edinburgh; and, by charter of date 1621, grants it "all the liberties, freedoms, immuninities, and privileges appertaining to any free college, and that in as ample form and large manner as a college has or brooks within this His Majesty's realm."

Thus, then, the Edinburgh University's privileges were made to embrace whatever privileges were possessed by the Universities of Paris, Aberdeen, Bologna, etc. "Consequently," argue the universitarians, "the diploma of our University entitles its holder to practise the profession of medicine in all its branches." To this the Colleges' party rejoin (resting their objection on their interpretation of the Pope's Latin), "No! surgery is not a science, it is only a craft;" or, to put it in the words of their advocate, surgery "is properly a craft; it is not a science like medicine. It involves science, no doubt, like every craft. I know of no craft that does not; but it is a handicraft. That is not only the etymological meaning of the word, but it is the strict proper meaning at the present day; and we have the distinction between these branches of the healing art, if I may properly use the expression here, because I admit at once that surgery is a handicraft in the healing art, but nevertheless a handicraft."

Such is the question which our Edinburgh friends have brought up for the consideration of the Privy Council. What is a surgeon? Is he a man of science, or is he a mere craftsman? If his business is a science, as the University avers, then the University will be happy, and will make surgeons; but if his affair is only that of a craft, then the Colleges in Edinburgh can take entire possession of him, and will return over the Border *victores ovantesque*.

The tale is instructive. It reveals clearly enough the anomalous and confused position of the practitioners of medicine in this country in reference to the licensing bodies. The interpretation of the Pope's Latin is to decide what a surgeon is, and what are the surgery-diploma-giving powers of the Edinburgh University! An expert will probably be required from the Vatican—say Cardinal Wiseman—to decide the meaning of the different terms in Alexander's bull, because authority has said that only they who write can interpret Popes' Latinity.

The only moral we have now to draw from this tale at present is, that we have here a good example of the conduct of the man who deals "in freedom of opinion". We find the Edinburgh College of Physicians, which has during the past few years been indulging in the highest flights of liberal sentimentality, suddenly affected with a fit of extraordinary conservatism. It had been assuming, on the broadest scale, university functions, by silently acquiescing in the assumption of the title of Doctor of Medicine by its licentiates; it had been calling aloud upon Lords and Commons and Medical Councils for every kind of liberal indulgence; but, as we have said, like the man who is "for freedom of opinion", it cannot bear to see another take its share at this table of liberal conclusions.

CHILD-MURDER: ITS RELATIONS TO WET-NURSING.

WE rarely take up a newspaper without meeting in its pages instances of child-murder. In the parish of Marylebone the infanticide proceeding is of weekly, not to say of daily, occurrence. This is a sad state of things, and our profession cannot remedy the evil. But there is another kind of child-destruction, equally sure in its effects, though not so manifest and patent to the eye of the public and the police; and this fatal influence finds origin in the system of wet-nursing. And here, we regret to say, that we believe our profession plays a very responsible part. We would ask this question, and force it upon the attention of our brethren, Is the medical attendant justified in recommending or sanctioning the services of a wet-nurse, except in those cases in which the mother is actually incapacitated to perform the duties of a mother to her offspring? We believe that a member of the Obstetrical Society who would urge the ebate of this question in that learned body would do a very great benefit to society. The question of wet-nursing is not a narrow one; it has very extensive bearings, and, above all, it has this painful taint inherent in it, as one of its certain and necessary results, namely, the neglect and, in many cases, the death of the children of the wet-nurses. We are satisfied that a calm and candid examination of the subject would show that our profession is not blameless in the matter, and that, in high and fashionable life, we too readily both permit, and even enjoin, the practice of wet-nursing. We cannot expect society itself, as a mass, to look very far ahead in a matter of this kind; but it is, most assuredly, the duty of our far-seeing and philosophic profession to consider the subject, not from one point of view, but under all its bearings; and honestly to work out the conclusions deduced from such consideration. The question is clearly a complicated one; it concerns society at large, as well as the mother whose health, it is supposed, requires this extraneous aid in bringing up her child. We are bound, by every right principle, to consider the health of the wet-nurse's offspring just as much as the health of our lady patient's, who is able to pay for the luxury of hiring another to feed her child. Here, then, are the questions which demand a serious answer:—What becomes of the children of wet-nurses during the period that their mothers are suckling the offspring of other persons? Are not numbers of their lives yearly sacrificed as the direct result of wet-nursing? Is our profession justified in recommending the use of a wet-nurse in any case? If so, is it justified except in those urgent cases in which the life of his patient, mother or child, may be endangered by suckling? It is time that this matter was taken up on the high grounds of morality. And if we are not greatly mistaken in our views, discussion of it will clearly show that morality is very condemnatory of the proceeding as now generally practised. We should be glad to elicit the opinions of our brethren on this point of general interest.

THE WEEK.

THE subject of the use of alcohol is daily becoming one of more importance. The question of its influence or action on the body in health, is being daily canvassed by the chemist and physiologist; and as far as their lights reach, it would seem that not only is alcohol not of service to the body in health, but is actually injurious. Here are Dr. Parkes's views:—

"I must candidly say, with regard to the stronger alcoholic liquids, that what study I have been able to give to this subject, and to the causation and treatment of disease generally, has led me more and more to adopt the view of Carpenter and others, and to believe thst the use of alcohol in health is not only unnecessary, but is absolutely injurious. The effect of light wine, beer, tea, and coffee, in impeding metamorphosis is, however, so inconsiderable, and their irritating effects on tissues are so slight, that there seems nothing to urge against their moderate use."

So that spirits, according to him, are actually hurtful to the sane body; and wines of the lighter sort are only to be tolerated because they will not do much harm. We are certainly not disposed to allow the chemist or the physiologist to settle a question of this kind—for there is one great authority, experience, which is greater than theirs. Nevertheless, we are bound to give due consideration to the deliberate conclusions of men of the calm judgment of Dr. Parkes. We trust shortly to discuss this important subject of alcoholism at length.

A conversation took place at the Pathological Society some weeks ago respecting the merits of the laryngoscope. The general impression of those who had used it was, that in most cases of disease requiring such examination it was not possible to derive much advantage from its employment. Either dyspnœa, or undue irritability of the larynx and associated parts, was present, or both; so that the difficulties were considerably increased under these circumstances. This opinion quite concurs with our own personal experience in the use of the instrument. The individual whose throat is to be examined must go through a long course of training before he is able to bear the manipulation required for the inspection of his larynx.

The commanders-in-chief of our two bodies militant, viz., the Church and the Army, have a difficulty in dealing with one of the physical productions which is an inseparable and inevitable companion of each male warrior in their respective armies. This physical phenomenon is as hard to manage, in the eyes of routine, as many of the moral and psychical phenomena of his nature. You cut it close away in the morning; it is there again in the evening. We need hardly say that we are writing of the hair, of which Nature has planted the roots on the visage of Adam's male children, and of which (in accordance with the rules of civilisation, as they are called) we have most of us been compelled for many a long year daily to mow down the *other ends*. Happily, with our modern sensible attire—we are, of course, speaking only of the male attire—has also arisen a general feeling that Nature did not plant hair on a man's face simply to give him the daily trouble in removing it. The public at large have begun to exercise their own free and individual opinions on the subject, and fashion does not bear hard upon them. But the two bodies above spoken of have other masters to please besides fashion; and these masters, like respectable *patres conscripti*, have reminiscences of how things were managed in other days; they are naturally led to look with grave suspicion or serious displeasure on this hirsute appendage in vigorous growth on the human face divine. Now, in a matter of such difficulty and conflict, we should recommend the prejudiced to adopt the very simple plan of putting their faith in Nature; they will then see that this hair on the face must have its office assigned it, just as have their five episcopal or military fingers, which pen remonstrances or general orders against whiskers and beards. In a climate like ours, this growth is of the highest service; and it is impossible to supplant its use by any artificial means. We are satisfied that our profession will do its best to support this very sensible movement, which promises, at no distant period, to diminish the business and ease the labours of the "weary knifegrinder". It is the old tale—Nature asserting her rights.

"Naturam expellas furcâ, tamen usque recurret."

The difficulties resulting from this struggle against Nature by Horse Guards tapeism are thus given by the *Army and Navy Gazette:*

"Soldiers' Hair. Officers in command are much divided in opinion on this subject. Some are indifferent to the length of hair; others insist on cropping the men like convicts; while nearly all, with very rare exceptions, declare for the abolition of razors, and the study of the book of Nature. But the fact is, strange as it may appear, on this point so vitally connected with the discipline of the service, there are no orders to guide the discretion of our colonels and generals; and consequently the tastes of their officers are various as schoolgirl's whims. In one district, a man may be a very Cingalese in luxuriant tresses; in another, not even the scalp-lock of the North American is left him. In some regiments, his neck must have the smoothness of a swan's; in others, he may sport a Newgate frill with impunity. In the present Queen's Regulations, the item is entirely omitted; whether or not it was too difficult for legislation, we cannot say; but it could scarcely have been forgotten. The more so, as the order in the old edition ran as follows:—'The hair of the troops is constantly and habitually to be cut short both at the top and sides of the head, according to the order of the Sovereign; and the fashion of the day is not to be permitted to influence the practice of the army in a particular which is considered alike essential to the health, the cleanliness, and the military appearance of the soldier.'"

The *Union Médicale* contains some details of the death of Dr. Gendron from croup, referred to in our last number but one. The facts are interesting, as indicating the possible communication of the disease by actual transfer of the virus. They are given by Dr. Charcellay, of Tours, who attended his unfortunate colleague. Dr. Gendron was convinced from the first that he should not get over the affection, which he had contracted in attending a woman suffering from croup, who had been suddenly carried off, notwithstanding that tracheotomy had been performed upon her. He was in continual dread of an attack of the disease, in consequence of his face having been covered with mucus and false membrane, expectorated by the patient during the operation. Throughout the duration of the disease Dr. Gendron appears to have suffered greatly. Pure hydrochloric acid was applied to a diphtheritic patch which appeared in one of his amygdalæ and caused excessive pain, and in the same evening nitrate of silver solution. Tartar emetic was administered, and caused vomiting and much purging. Great œdema of the pharynx and laryngeal croup ensued, and he was rapidly carried off in the course of a few days. One cannot help remarking upon the nature of the treatment in this case; and from the results can certainly find nothing which would recommend its repetition. Here is a disease which is peculiarly marked, as is well known, by excessive prostration of the vital powers, and yet even in the last attack of it in this case tartrate of antimony and ipecacuanha were administered. The main point of all—the sustaining of the powers of life whilst struggling against the disease—seems to be quite overlooked by our French brethren. Then, again, is it rational, the application of pure hydrochloric acid to the throat? Is it not certain that it must inevitably produce some of the ordinary results of inflammation, congestion and swelling for instance, which should, above all things, be avoided in cases of this nature. The patient died in extreme agony, and was manifestly suffocated by the œdema and false membranes. The idea of tracheotomy does not seem to have been entertained in this case.

The London College of Physicians is rapidly proceeding towards a consummation of its present enlarged intentions—the collecting under its wings of the medical practitioners of the country, or, in other words, the granting of a licence which shall replace the licence of Apothecaries' Hall. The bye-laws under which the College will act in this matter are already published, and have been noticed in our pages—the nature of the examination, and qualifications required from candidates. On Thursday last the College advanced one step further in this direction. It met together to elect examiners, and to make final arrangements for the examination proposed. Consequently, the profession may expect, at an early moment, to hear that the medical portals of Pall Mall College are open to every aspirant to a medical qualification in this country. The College now is bold enough to disdain the old wit, *Nulla vestigia retrorsum*, and takes up the position it lost in 1815. But will the Worshipful Company of Apothecaries rest quiet under this new position taken up by the College? Time must show. They have, it is true, threatened, and, we hear, are resolved, to have their rights put legally square by the people at Westminster Hall. If so, the first accepted licentiate of the new medical honours referred to will be the *cheval de bataille* through whom the question will be judged. The College of Physicians is, we hear, confident of its position—that it is a correct and readily definable one.

The following Fellows of the Royal College of Physicians have been elected examiners under the new bye-laws of the College:—In *Preliminary Education*, Drs. W. A. Guy, P. Black, and Henry Thompson; in *Physiology and Anatomy*, Drs. Handfield Jones and W. Brinton; in *Materia Medica, Chemistry, and Pharmacy*, Drs. Frederick J. Farre and G. Owen Rees; in *Principles and Practice of Medicine*, Drs. W. A. Page, T. A. Barker, and W. H. Walshe; in *Midwifery*, Drs. A. Farre and C. West.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Shropshire Scientific. Annual General.	Lion Hotel, Shrewsbury.	Friday, Jan. 20, 2.30 P.M.
Metropol. Counties. General.	37, Soho Square.	Wed., Jan. 30. 4 P.M.

SUBSCRIPTIONS PAID FOR 1860.

Members who have paid for 1860, accidentally omitted from last list:—

Beadles, H., Esq., Broadway, Worcester.
Clarke, J. L., Esq., Saltash, Cornwall.
Gillett, W. E., L.R.C.P.E., Taunton.
Minshull, J. L., Esq., Liverpool.
Paterson, G., M.D., Tiverton, Devon.
Sewell, R. R., M.D., Bridgwater.

SHROPSHIRE ETHICAL BRANCH.

The Council of the Shropshire Branch beg to remind the members that their subscriptions to the British Medical Association and Medical Benevolent Fund for the current year became due on the 1st instant; and they will feel obliged if the members will remit the amount of the same by post-office order to Dr. Jukes Styrap, Hon. Sec.; punctuality in payment being most essential to the successful progress of the parent society.

WEST SOMERSET BRANCH.

This Branch has been re-established, and is again in active operation. *President:* J. Prankerd, Esq. (Langport). *Council:* H. Alford, Esq. (Taunton); W. M. Kelly, M.D. (Taunton); G. Kidgell, Esq. (Wellington): R. Marchant, Esq. (North Curry); H. W. Randolph, Esq. (Wiveliscombe); W. Reynolds, Esq. (Wellington). *Honorary Secretary:* W. E. Gillett, M.D. (Taunton).

Parisian Hospital Statistics. There are in Paris at the present time in hospitals and infirmaries of the hospices 7,877 beds appropriated to the treatment of diseases. The beds of the hospitals are divided as follows:—For medical cases, 3,250; surgical cases, 1,706; accouchements, 677; skin diseases, 933; venereal diseases, 612; making a total of 7,178. In 1859, 96,082 patients were treated in the hospitals and hospices—90,996 in hospitals, and 5,086 in hospices.

Special Correspondence.

EDINBURGH.

THE present condition of the Edinburgh Medical School is probably known to many of your readers. It is so split into factions by opposing interests as to be incapable of earnest united action for the general improvement. This is much to be regretted, as it tends to injure the reputation of the school, and somewhat obscures the immense advantages which it in reality possesses. Let me explain how matters stand at present. The interests of the University and of the Extra-academical School are, unfortunately, directly opposed to each other; and the result of this is a want of that cooperation in scientific matters which is of so much importance. The extra-academical school is composed of a body of lecturers unconnected with the university. There are generally lectureships corresponding to each of the professorships, but the fees are lower than in the university. Attendance upon their classes did not originally qualify for the university examinations; but about five years ago the Town Council, then patrons of the university, having established legally an absolute authority over it, ruled that, as the university admitted for examination students who had attended a certain proportion of their classes in the hospital schools of England, or in the College of Surgeons, Ireland, the same privilege should be extended to the Edinburgh private school, to the extent of allowing students to take one-third of their classes there, provided they paid the same fees as they would have paid in the university. This was of course a severe blow to the interests of the professors, whose emoluments are mainly derived from the fees of the students; but as, after long litigation, the Town Council established a right of the absolute control over the university, they found that they could make no effectual resistance. Thus there arose a bitter opposition between the schools, which has led to a certain degree of languor in the medical societies, and to a want of cooperation in scientific investigations very injurious to the general interests. This system of opposition has its supporters as well as its opponents. The extra-academical school has long been recognised as a valuable institution in Edinburgh; for if any subject were badly taught within the university, the students might generally find a better teacher without; and young men ambitious of rising to the professorial dignity might at the same time improve and demonstrate their claims by commencing as extra-academical teachers. Most of our eminent professors have commenced their career as teachers in this way. The whole question of the privileges of the extra-academical school is, I understand, to be fully considered by the Privy Council, and a decision may be expected about the middle of January. Whatever this decision may be, it is to be hoped that it may tend to produce a more healthy tone of feeling among the different professors and teachers.

At the first meeting of the Medico-Chirurgical Society, the subject of acupressure, Professor Simpson's new mode of arresting arterial hæmorrhage, was discussed. Dr. Handyside read an account of a case of a young man, a miner, who had sustained a compound fracture of the tibia and fibula, followed by spreading gangrene. After gangrene had set in, Dr. Handyside was consulted as to the propriety of amputating under the circumstances; and, thinking it right to give the patient the chance, he amputated below the trochanters, and instead of using ligatures to secure the arteries, he employed needles as recommended by Dr. Simpson. Two of these needles were removed twenty-four hours after the operation, and that securing the femoral artery was removed at the forty-ninth hour, without the loss of a drop of blood. The patient made an excellent recovery. Some members thought that the favourable result was quite unconnected with the use of the needles; but, however that may be, it is evident that the needles suffice to arrest hæmorrhage, and may be used with perfect safety. It remains for further experience to show whether they possess any advantage over the ligature. Quite independently of the acupressure, however, Dr. Handyside's case is of great interest, as it is seldom that amputations so far up in the limbs do not prove fatal, especially when the parts below are gangrenous.

At the first meeting of the Royal Society for the session, the Duke of Argyll delivered an inaugural address as president, an office which has been successively held by Sir Walter Scott and Sir Thomas Macdougall Brisbane. He directed attention mainly to three subjects; namely, Sir Roderick Murchison's reclassification of the more ancient rocks of Scotland; the evidence as to the antiquity of our race, afforded by the instruments of human workmanship recently discovered under deep strata of gravel at Abbeville in France; and Mr. Darwin's theory of the origin of species. As to the antiquity of the human race, he inclined to think that man must have lived upon the earth for a much greater number of years than the chronology generally received supposes. Of Mr. Darwin's theory he expressed no positive opinion, though evidently inclining to disbelieve it, contenting himself simply with drawing attention to the points at issue, and indicating some of the advantages to science which had been gained by the publication of Mr. Darwin's work.* At the second meeting of the Society for the session, the question of the original distinctness of the races of man was dealt with, in a communication from Mr. Murray upon the pediculi infesting different races. The author stated that it has been held by some that if the pediculi can be proved to differ upon the different races, the races themselves must be different. Overlooking the questionable correctness of the inference, he had determined to investigate the question of fact. He took immense pains to obtain specimens of the interesting animals from all parts of the world, and had harassed his friends in all quarters with requests that they would obtain them for him. He showed that not only do the pediculi assume a colour resembling that of their *habitat*, just as the hare, the rabbit, the ptarmigan, the parr, etc., do, but that they present marked differences of form such as, in his opinion, warranted their being considered specifically distinct. Thus far observation favoured the view; but, unfortunately for it, it was further shown that the most marked differences exist between the pediculi of nations and races, which no one can hold to be distinct. On the whole, he concluded that the pediculi could afford no information upon the great question, and in that opinion the Society seemed to agree with him. A discussion followed as to the cause of the change of colour in the pediculi inhabiting different races; Dr. Bennett suggesting that it might be dependent upon the pigment of the skin on which they lived, while Dr. Christison inclined to ascribe it to some molecular change within the body. Various members related curious experiences upon the subject of pediculi generally. Among them, Dr. Bennett mentioned the case of a lady who conceived her skin capable of producing them in immense numbers, and who was in the habit of rubbing herself with cotton wool to relieve the itching. He succeeded at length in convincing her, by means of the microscope, that what she conceived to be pediculi were merely little pieces of cotton wool which had separated from the mass during the friction.

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* Lord Neaves, in the course of an amusing speech, referred to the tendency of Mr. Darwin's family to theory-making, and quoted as an example the doctrine once advanced by the elder Darwin, to explain the instinctive liking which most men feel for the form of the female breast; viz., that from it we receive our earliest food and enjoyment; and, consequently, that with it are bound up early pleasant associations. In reply to this, Mr. Darwin was requested to show that individuals who had been brought up on the bottle, ever afterwards regarded that instrument with peculiar affection.

The Memoir of Dr. George Wilson, Professor of Technology in the University, by his sister, has lately been published. It is a thick octavo volume of great interest, though somewhat prolix.

The Life of Professor Edward Forbes, upon which Dr. George Wilson was engaged when he died, is being completed by Mr. Geikie, and will be published soon. It will be read with interest, both on account of the subject of the memoir, and as in part the last work of the graceful pen of George Wilson.

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, January 8th, 1861.

F. C. Skey, Esq., F.R.S., President, in the Chair.

ON THE PATHOLOGY AND TREATMENT OF ECZEMA.

BY J. L. MILTON, M.R.C.S.

(Communicated by J. Simon, Esq., F.R.S.)

The author began by examining the general opinion that eczema was a vesicular disorder,—a view adopted by all writers, with the exception of some faint dissent on the part of M. Devergie and Mr. Wilson, who, however, had not sought to interfere with the classification so long established and so generally received. After pointing out that the explanation of M. Devergie—that the development of the vesicles is only momentary—is untenable, and that in reality vesicles, so far from being fleeting, are able to bear considerable pressure and friction, he proceeded to state his conviction, and the grounds for it, that true eczema is not vesicular at any period of its existence. Three circumstances, however, were noticed which may have contributed to support the view usually received. The first was, that on parts slightly furnished with hair the discharge of eczema accumulates in minute drops; but neither the course, situation, nor form of these correspond with those of real vesicles. The next was, that in the vicinity of eczematous patches genuine vesicles are occasionally found; they last, however, but a very short time; their return or disappearance is very uncertain, and they are not at all dependent on the state of the eczema: it was difficult to say whether they arose or not from the friction of the clothes, irritation of lotions, etc. The third was, the confounding of a genuine form of herpes with eczema. This variety of the disorder was marked by the itching and stinging pain; acute, regular course; and *firm*, genuine, irregular vesicles. The author considered this as one of the exanthemata, the course of which could scarcely be materially checked by any kind of treatment. It was to this form that he ventured to refer eczema,—solare and mercurial eczema. Eczema solare, indeed, he considered, was no more eczema or herpes than scabies or blistering from cantharides. He divided eczema into the acute form, in which a large portion of the skin—that of the face, for instance—becomes red, swollen, and stiff, with desquamation, weeping, and crusts; and the chronic. He wished to reject eczema impetiginodes, considering it a different form of inflammation. For the reason that eczema is not vesicular, its vesicles cannot become pustular. He admitted two varieties of the disorder: one in scrofulous children—an elevated and tubercular state of a tract of skin, covered with loose, soft scales, very refractory, and followed by cicatrices; and the ulcerative form, which attacks the ankle and leg in persons of mature and advanced age, often laying the foundation of ulcers. He considered that eczema was essentially a desquamative inflammation of the true skin, and rather to be classed with pityriasis and lepra than amongst the vesiculæ; pityriasis, indeed, and ringworm, were closely allied affections.

As to the treatment, he had always found that in severe chronic eczema antiphlogistic treatment was useless as a curative means, and lowering measures were hurtful. They were only serviceable in moderation in the acute form. Of mercury he could not report more favourably; and as, when given to excess, it would bring on a state allied to eczema, as well as a disorder very like scurvy, its value in large doses must be very doubtful. Of iodine and iodide of potassium, except in the scrofulous form of the disorder, he could not speak in any better terms. When rheumatism was present, iodide of potassium, especially if aided by colchicum, was often extremely serviceable, and it would sometimes induce diaphoresis when the skin was harsh and dry. But it was simply to be looked upon as an auxiliary; the author had never been able to cure a single bad case with it alone. Arsenic had not proved of such value as was anticipated, except in the dry stage; and in most persons soon induced such purging, nausea, and irritability, that it had to be abandoned. The tincture of steel, prepared by Mr. Thomas of Pall Mall, had answered best in his hands. It should be given in full doses, as from half a drachm to a drachm, twice or thrice daily. It should be conjoined with mild aperients; a plain, light diet, containing plenty of fresh vegetables, and active exercise. As to baths, the author placed no reliance whatever on them, except insofar as they contributed to cleanliness, which could not be too scrupulously enforced. Of all the external applications recommended, he had never met with but four on which reliance could be placed. These were, nitrate of mercury ointment, diluted with cold cream, for the head; the oxide of zinc ointment, for any part not covered with hair; the chloride of zinc in the form of lotions; and glycerine, for eczema of the ear. He denied that it was dangerous to check the discharge, even in old persons; in fact, he did not believe it was possible to effect this, except by means which improved the health and cured the disorder.

ON AN OPERATION FOR EXTRACTING A STONE FROM THE BLADDER BY URETHOTOMY AND DILATATION OF THE PROSTATIC URETHRA BY MEANS OF A DILATING-STAFF.

BY JOHN WOOD, F.R.C.S.

The author first called attention to some points in the relative anatomy of the pelvic viscera, important in estimating the value of the different perineal operations of lithotomy. These were illustrated by a diagram embodying the mean results of the dissection and measurements of upwards of forty subjects, and by drawings of the alterations produced by development from the period of birth to adult life, taken from actual dissection of subjects at birth, at two years and a half, eight and a half, and sixteen years, and in the adult. He showed that the surface of the perinæum lies in two planes, anterior and posterior, intersecting each other just behind the bulb of the urethra; and that a line drawn from the middle of the central tendon perpendicular to the posterior of these planes indicates the axis of the bladder when moderately distended, entering it at the urethral opening, and thus forming a safe guide for the finger and instruments in the perineal operations of lithotomy. In young children, this line is thrown more forwards, forming an obtuse angle with the posterior plane. He stated that the nomenclature of the pelvic structures in anatomical works had not had sufficient reference to their actual position in relation to the axis of the trunk in the erect posture. He showed that the proximity of the bulb of the urethra to the anus and rectum varied, in the adult, from three-quarters of an inch to an inch and a half. At birth, they are in close contact; below the age of puberty, from half an inch to three-quarters distant from each other. This was not sufficient room for the performance of Allarton's operation without considerable section of the bulb, which he considered objectionable, if it could be avoided. He attached much importance to the preservation intact of the deep layer of deep perineal fascia, where it is blended with the fibrous capsule surrounding the prostate, forming the grooved sheath of the levator ani muscle; and attributed to the median class of operations a greater safety against extravasion of urine above the lavator ani, from their preserving this layer of fascia entire. In the lateral operation, it was fairly divided, together with more or less of the levator ani. He thought that if the levator were cut at all, it was better to cut it freely, to allow a free escape for the urine; but that it afforded a greater safety to the patient, in all cases in which the size of the stone rendered it practicable, not to open its sheath at all, but to proceed by dilatation from the urethal surface of the prostate.

The author then briefly passed in review the comparative merits and disadvantages of the lateral and median operations. The lateral operation had the advantage in celerity of execution, and, when practised with a free incision, in the more facile removal of a large or encysted stone, and in the free escape of the urine. In safety to the patient of adult years, however, it is inferior, from the impending dangers of hæmorrhage and pyæmia, by its extensive interference with vessels and venous plexuses; and from extravasion of urine into the layers of pelvic fascia above the lavator ani, by the section of this muscle, its fascial sheath, and of the prostatic fibrous capsule. When the limited prostatic incision is attempted it is more liable also to the accident of the finger slipping from the staff and forcing its way between the bladder and the rectum, especially in the yielding tissues of young children. In the free incision, on the other hand, accidental section of the ureter and other important deep-seated parts has had fatal results. The median class of operations, depending upon dilatation without section of the prostate and neck of the bladder, has the advantages—that no cutting instruments enter the bladder or prostate, and that the incision is confined to aponeurotic structures in the most direct way to the bladder, and does not interfere with arteries or veins of any importance at all. In Allarton's method he thought the means of accomplishing the dilatation were insufficient in the adult, and that additional dilators or gorgets were objectionable on the score of complication and loss of time; that the bulb was freely cut, especially in children, and that the ejaculatory ducts were sure to suffer extensively from laceration by the probe tearing in the median line. He believed that section of the bulb diminished the chances of the patient, by exposing him more to the dangers of pyæmia and hæmorrhage, or the consequent formation of a stricture. The incision also, in Allarton's method, was placed so far forwards, and was so limited in extent, that great difficulty had been experiened in seizing and extracting a stone in a deep perinæum.

The author considered that our increased experience of the results of lithotomy in the adult had not as yet been followed by such a diminution of its consequent mortality as might have been expected.

The operation he had practised was based upon the use of a staff opening at the curve into two blades, which admit between them, through a perineal incision into the membranous urethra, the forefinger of the operator, to effect the chief part of the dilatation. The dilating power was increased by the pressure of the assistant's thumb upon a lever, which causes the posterior blade to turn upon its axis and to press backward upon the base of the bladder, holding it firmly towards the perinæum so as to prevent its yielding before the pressure of the dilating finger. With the slender model which was exhibited, and which was made for a child, the author had dilated in the subject many tough adult prostates sufficiently to extract good-sized stones without injury to the levator ani or its sheath, or to the prostatic capsule. To make the preliminary incisions he used a very narrow-bladed knife. The form of incision he had practised was a lunated one, commencing two lines to the right of the raphé, just behind the bulb, and carried in a curve to a point midway between the anus and left tuber ischii, terminating opposite to the former. The membranous urethra was then opened (upon a groove exposed by the divergence of the blades of the staff) from the bulb to the prostate gland, a little to the left of the median line, as in the lateral operation, to avoid injuring the ejaculatory ducts. The lateral tension of the urethra rendered this very easy to do. The rest of the opening into the bladder was done entirely by dilatation between the blades of the staff. The patient, a boy aged nine years, was operated on in King's College Hospital, December 1st, 1860. He had had symptoms of stone one year. The dilatation was easily and speedily accomplished, the stone at once reached and removed, only a few drops of blood being lost. He made a rapid recovery; the urine passed by the meatus in the first week, and entirely by the natural passage in a fortnight, when he began to have control over its evacuation, which in the third week increased to entire command. In less than a month the wound was entirely healed. This showed how little injury was done to the neck of the bladder and muscles.

The author thought that the form of incision he had used had all the advantages of the median operation, with much more room to use the forceps, etc., without injury to the bulb, rectum, and ejaculatory ducts, and with an easy capability of extension, in case of a large stone, in the site of the lateral operation, but ordinarily without division of the deep layer of deep perineal fascia. The advantages of the dilating staff were,—that the lateral tension renders a clean cut into the membranous urethra, and a fair introduction of the finger to dilate, easier to accomplish; that the dilating finger is guided into the prostatic channel with the increased certainty of a conducting blade on each side, and is aided by the dilating action of the blades holding down the bladder, and preventing its yielding before the pressure of the finger, allowing it at the same time more complete tactile perception of the resisting tissues than can be obtained by the use of gorgets or dilators, which are also thus rendered unnecessary. The pressure of the separated blades guards against the passage of the finger between the bladder and pubes, on the one hand, and the bladder and rectum on the other. Lastly, there is a more positive certainty of avoiding section of the prostatic capsule, and exposure to the deleterious action of urine effused into the pelvic fascia above the levator ani, than can be obtained by the use of the knife or gorget in the prostate cutting in opposition to the contracting levator ani.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 2ND, 1861.

TYLER SMITH, M.D., in the Chair.

THIS was the second annual meeting of the society. The following gentlemen were proposed as candidates for admission into the Society, to be balloted for at the next meeting: Drs. John Cooper and David J. Williams; Messrs. H. F. Bate, A. Fleischmann, A. Middleton, D. Nelson, W. W. Phillips, and G. Wilmshurst.

ELECTION OF OFFICERS FOR 1861. The following gentlemen were declared duly elected: *Honorary President:* Sir Charles Locock, Bart., M.D. *President:* Tyler Smith, M.D. *Vice-Presidents:* C. M. Babington, M.D.; J. H. Davis, M.D.; R. Dunn, Esq.; F. Elkington, M.D. (Birmingham); A. B. Granville, M.D.; R. U. West, M.D. (Alford). *Treasurer:* H. Oldham, M.D. *Honorary Secretaries:* Graily Hewitt, M.D.; T. H. Tanner, M.D. *Other Members of Council:* R. Barnes, M.D.; W. Bloxam, M.D.; W. D. Chowne, M.D.; J. Cholmondeley, Esq.; C. Drage, M.D. (Hatfield); G. D. Gibb, M.D.; T. F. Grimsdale, Esq. (Liverpool); F. S. Haden, Esq.; R. Hardey, Esq. (Hull); G. Harley, M.D.; J. B. Hicks, M.D.; F. Hird, Esq.; J. C. Langmore, Esq.; W. O. Priestley, M.D.; C. H. F. Routh, M.D.; S. Smith, Esq. (Leeds); J. G. Swayne, Esq. (Bristol); and J. Whitehead, M.D. (Manchester). (This list is different from that first circulated amongst the Fellows, an alteration having been rendered necessary by the lamented death of Dr. Rigby.)

Auditor's Report. After payment of all the expenses of the Society up to the 31st December, 1860, a balance remained in the treasurer's hands of £277 : 1 : 6. The report was unanimously adopted.

The Annual Address was delivered by the newly elected president, Dr. Tyler Smith, who referred in feeling terms to the loss the Society had sustained in the death of the late president, Dr. Rigby. He dwelt upon the high reputation of Dr. Rigby's father as an accoucheur, and the careful education and training of the son in all that could render him fitted for a successful career in midwifery. He enumerated his published works, alluding to the views held by Dr. Rigby in regard to the constitutional treatment of uterine disease—to his efforts in engrafting the mechanism of labour as taught by Naegelé upon English midwifery—and to his devotion to the record of "cases" as one of the greatest and surest means of advancing medical knowledge. He also enlarged upon his successful career as a practitioner, lecturer, and examiner; and especially upon the services rendered to the Obstetrical Society by his conduct as president, and his exertions during the early formation of the laws and constitution of the Society. He concluded this portion of his address by putting to the Society the following resolution of sympathy and condolence, which had been prepared by the Council, and in which it is almost needless to say the Society most cordially concurred:—

"This meeting, being informed of the death of Dr. Edward Rigby, the first president of the Obstetrical Society, is desirous of expressing publicly its great regret for the loss the Society and the profession have thereby sustained.

"The Fellows of the Society desire to record in the warmest manner their grateful recollections of his unvarying ability, courtesy, and urbanity, while presiding over their meetings."

Ordered—

"That this resolution be recorded in the Minutes of the Society's proceedings, and that the honorary secretaries be directed to forward a copy of the same to the relatives of the deceased, expressing at the same time the sympathy of the Society with their bereavement."

In detailing the progress of the Obstetrical Society during the year, mention was made of the large accession of new Fellows; the publication of the first volume of *Transactions*, and the *Register of Obstetric Cases;* the appointment of local secretaries; and the meetings which had taken place respecting the amalgamation of the different medical societies.

The Parts involved in a Case of Uterine Hæmatocele. By H. Madge, M.D. Dr. Madge showed all the pelvic viscera, taken from a woman who died of the effects of uterine hæmatocele. Accompanying the preparation was a large clot and about a pint of blood, taken from the cavity in the posterior half of the pelvis forming the hæmatocele; also, from the same subject, the inferior vena cava and some of the veins of the pelvis, containing casts of fibrine, which had existed in connexion with phlegmasia dolens of both legs.

Fibrous Tumour of the Uterus. By T. H. Tanner, M.D. The patient first applied to Dr. Tanner on June 6th, 1855; she was 34 years of age, and had been married seven years. She thought that she had been pregnant twice, and had miscarried each time at an early period; though subsequently she believed this opinion erroneous. The catamenia first became more abundant than usual in 1852; but it was only about the middle of 1854 that frequent and prolonged attacks of flooding were experienced. During the four months, from the beginning of February until her application to Dr. Tanner, the catamenia had been on constantly.

Mrs. H. was a remarkably fine, tall woman, and very stout; but the loss of blood had given an exsanguine appearance, and rendered her very feeble. The abdominal parietes were so loaded with fat that it was difficult to learn the condition of the viscera; but there was greater dulness over the hypogastric region than elsewhere, and such a sense of resistance as would be communicated by a solid tumour. *Per vaginam*, the uterus was found very high up, and almost out of the pelvic cavity; so that the cervix could scarcely be reached. The os uteri was seen, by a long speculum, to be very contracted; and attempts to pass a small bougie into the uterine cavity were unsuccessful. She stated that occasionally the uterine discharge was like dirty water, and of a very offensive smell. Relief had been sought without any benefit. The diagnosis made was some small foreign body in the uterus, but probably of doubtful nature; also some ovarian or uterine tumour occupying the lower part of the abdomen. From the month of June 1855, until the day of her death, Dec. 27th, 1860, she was constantly under the care of Dr. Tanner. The flow of blood from the uterus was always checked with great difficulty; and generally, a few days after it was controlled, it was again excited by the return of the catamenial period. Astringents of all kinds were freely tried on various occasions; but at no one time did they effect any good whatever. Among them were acetate of lead, ergot of rye, the mineral acids, gallic acid, cinnamon, iron alum, the sesquichloride of iron, opium, galvanism, the application of ice, plugging the vagina with cotton wool, etc. The infusion of digitalis did harm. The only agent which had any effect in checking the hæmorrhage was mercury. The good effects of this mineral were obtained as soon from the bichloride of mercury as from calomel given to the extent of salivation. During the last few months, however, the patient became much exhausted by her long illness, and at the same time she suffered much from irritability of the stomach, so that there was sometimes an inability for several days to take stimulants and nourishment. She gradually became weaker, but did not lose flesh, and at length sank exhausted on Dec. 27th, 1860.

At the autopsy, Dr. Tanner found the body quite bloodless. The adipose tissue on the abdominal walls was two inches in thickness; the lower part of the abdominal cavity was occupied by an oval cyst, which was apparently formed by a stretching upwards of the peritoneum over the fundus uteri; it contained a pint and a half of fluid, while a smaller cyst had only two drachms. By means of this cyst (which rested on the wings of the ilia) the uterus was kept out of the pelvic cavity. On examining the cavity of the womb, it was found to contain a fibrous tumour, of about the size of a very small orange cut in half. The tumour was seated in the posterior wall of the uterus, its base or attachment being its broadest part; while it projected into the uterine cavity for about three-quarters of an inch. The other organs of the body were healthy.

The uterus, with the cyst and the fibrous tumour, were shown to the Fellows of the Society.

Treatment of Nausea and Vomiting in Uterine Inflammation and in Diseases of Menstruation. By Edward J. Tilt, M.D. Nausea and vomiting are said to be comparatively uncommon in uterine affections, but very distressing from the loss of strength and from the irritability and despondency which followed them. The fact of nausea and vomiting occurring so frequently in connexion with otherwise healthy menstruation and with pregnancy, was considered to explain why vomiting was a symptom of diseased menstruation; and their occurrence during amenorrhœa, dysmenorrhœa, and menorrhagia, in which the body of the womb, and more particularly its lining membrane, is implicated, was given to explain why nausea and vomiting are frequent symptoms of internal metritis, whether chronic or acute; whereas it was said to be extremely rare to meet with them when the neck of the womb was alone implicated, for they neither accompanied its various kinds of ulceration nor the catarrhal inflammation of its mucous membrane, which is the most common of uterine affections. Continued nausea was represented by Dr. Tilt as much more frequent than vomiting, most troublesome in the morning, going off after breakfast or dinner, increased by worry, excitement, the fatigue of dressing or talking, and being sometimes so irksome as to cause patients to refuse taking any food unless forced to do so. Some patients only vomited once or twice in the morning, others more frequently. One only vomited at menstrual periods, and then incessantly for two or three days with but short intervals of rest. Another thought that she vomited all her food for a year; and in one case the vomiting was continued for eight years, killing the patient at last by inanition. In most of these distressing cases there were no symptoms of biliousness, the sickness being a reflex nervous phenomenon, as in pregnancy. Dr. Tilt stated that uterine treatment, such as leeches to the womb, or the application of potassa fusa cum calce, would sometimes suddenly check the vomiting for a period; that this result cannot be depended upon; and that besides the regular treatment of the uterine affection, it was necessary to adopt some other treatment to mitigate the patient's sufferings. Even when the patient presented little signs of biliousness, Dr. Tilt advised, as a preliminary measure, a full dose of calomel, followed by alterative doses of blue-pill, to be continued for a week or ten days. This would sometimes very much diminish the vomiting and nausea; if not, the well known minor remedies for sickness might be tried in succession. Strychnine was also mentioned as having been useful with some patients; and various interesting cases were related, showing the utility of a solution of morphine, given in effervescing draughts, and repeated after every fit of vomiting, two grains having been, however, sometimes given without quelling the sickness. Blisters to the pit of the stomach, dressed in the usual way, or with acetate of morphine, were favourably mentioned; and, as a last resource, Dr. Tilt advised an issue to the pit of the stomach, by which means he was able to check vomiting which had lasted incessantly for a year in a patient who, last winter, was only kept alive by brandy. The issue had been discharging for six months, and still continued to check the sickness, notwithstanding a severe relapse of internal metritis, which had caused this distressing symptom. In another case of chronic inflammation of the womb, vomiting seemed to relieve the still more distressing pains, so Dr. Tilt did not think himself justified in recommending the application of an issue. When nausea was protracted, he urged the necessity of forcing patients to take a few mouthfuls of food repeatedly in the course of the day, as in the sickness of pregnancy; and he advised those who suffered from morning sickness to take a little tea, milk, rum or brandy on waking and before getting up.

A discussion followed, in which Mr. Gervis, Dr. Rogers, Dr. Tyler Smith, and Dr. Tanner took part.

Correspondence.

AN UNFOUNDED CHARGE.

Dr. Watson of Chester has been the temporary victim of "crowner's quest law". He has been stupidly censured by a jury, and accused of having, by inadvertence, caused the death of an infant. That he had no more to do with the death of the child than the coroner himself, is plainly evident from the following facts. Dr. Watson was called to see a lady suffering from abdominal derangement. He ordered Dover's powder internally, and laudanum stupes externally. He also gave directions that the child (six weeks old) should not be allowed to suck the breast whilst the mother was under the influence of the Dover's powder. The child was put to the breast, nevertheless, shortly after the medicine was taken; and it fell into a sleep from which it never awoke. The jury then met, as we have said, and gave the following sapient verdict:—

"The deceased died from the effects of the absorption of laudanum externally applied to Fanny Sutcliffe, the mother of the said child; and the jurors are of opinion that Dr. Watson is culpable for not having given more specific directions as to the quantity of laudanum which should have been used as an external application, knowing the said laudanum to be a deadly poison."

Dr. Watson hereupon, with great good sense and right feeling, appealed to his professional brethren—to Dr. Christison, and to the Medical Society of Chester; and, we need hardly say, receives from both quarters complete exculpation in the matter. We give the opinions of both Dr. Christison and the Medical Society. The one will be found very interesting in a medico-jurisprudential point of view, and the other will exhibit the good feeling of Dr. Watson's brethren of Chester towards him.

Copy of Dr. Christison's Letter.

Edinburgh, Dec. 19th, 1860.

Dear Sir,—You will think me slow to answer your letter. The truth is, I have already twice nearly concluded a reply, but destroyed it on observing that I had somewhat uncompromisingly censured the coroner's jury, who, after all, cannot help that, in such a matter, they are ignorant *quoad hoc*, and who judged according to their light.

The verdict of the inquest must proceed on one of three views, so far as I understand it.

Assuming that death arose from the action of opium, the verdict must hold—

1. Either that a sucking infant may be poisoned with opium unto death by sucking its mother's milk, and without the mother experiencing any effect at all from the drug; or,

2. That an infant may die of poisoning with laudanum through exposure to its vapour or fumes; or,

3. That, in this particular instance, death arose from the child sucking, licking, or lying in contact with, the pledgets over-soaked with laudanum.

But I do not know a single fact in the records of medicine to support the first of these views. There are positive facts against the second. Orfila long ago showed that the emanations from opium and its preparations cannot cause poisoning; and I have often been exposed for hours daily to the emanations from large quantities of opium preparations, without experiencing any effect whatever.

The third view is the only feasible mode of conceiving poisoning with opium in such a case as this. But death could not arise in that way, without traces of the manner of exposure to the influence of the poison being discovered; and no such evidence was found, and indeed none seems to have been sought for on this occasion.

In the absence of positive or even presumptive proof of a manner in which the laudanum could have acted, the question of natural death falls to be considered. But here the inquiry is altogether at fault. Infants *will* die suddenly or rapidly, in a very obscure way, from natural causes. Such cases may imitate poisoning; they require great care in the investigation; and sometimes, with every possible care, the truth cannot be satisfactorily discovered. But a skilful inspection of the dead body is the most likely of all means for making the discovery; and, nevertheless, this measure was wholly neglected. Such neglect vitiates, in my opinion, every conclusion which can be drawn from the other evidence. And hence, were there a court of review in England, as on the continent, for checking erroneous verdicts, I have no doubt this verdict would be quashed.

You inform me the coroner claims for his jury that they decided the case by the rules of common sense. But common sense, in such a question as this, must judge according to established medical fact and doctrine. If common sense do not judge in that way, it is certain to result in some very uncommon nonsense.

I rather imagine the coroner meant that his jury judged by intuition; for many people make the mistake of confounding the two guides. But intuition can no more enable an ignorant coroner's jury than a profound medical philosopher to solve an intricate and novel medical question either of fact or theory.

As for the imputation thrown upon the medical attendant by the verdict of the inquest, such a result is simply ridiculous, in the circumstances as put before me.

I am yours truly, R. Christison.

Dr. G. B. C. Watson.

Copy.

At a meeting of the Chester Medical and Ethical Society, held in the Library of the Infirmary, December 24th, 1860, Mr. Harrison in the chair, the following resolution was proposed, seconded, and carried unanimously:—

"That this meeting, having heard read the depositions taken before the coroner in the case of Fanny Bruce Sutcliffe, an infant, and having heard Dr. Watson's explanations of the case, is of opinion that Dr. Watson is not to blame in his treatment and management of the case, and that he has shown every caution necessary. The meeting is also of opinion that, in consequence of there not having been any medical witness produced before the coroner, the jury gave their verdict without sufficient evidence; the mother, and an old woman who acted as nurse, being the only witnesses examined. (Signed)

"John Harrison, *Chairman.*

"Thos. Brittain, *Secretary.*"

A MATTER OF FACT VIEW OF THE USE OF MERCURY IN DISEASE.

Letter from Thomas Pope, Esq.

Sir,—If you deem this of sufficient importance to merit a place in the Journal, be it so.

We will suppose a case of very frequent occurrence with the following symptoms; viz., a darkened skin of a yellowish cast; the same appearance of the sclerotic; a highly furred tongue; no secretion of saliva, but instead thereof an abundant faucial secretion of mucus, flatulence more or less, a disagreeable fetor of the breath, with a most unpleasant taste, particularly on first awaking in the morning; all the symptoms of anorexia more or less; dyspepsia; enlargement of the liver indicated by palpitation, pain in the right chest and as high as the shoulder, with uneasiness on deep inspiration; frequent inability of left lateral decubitus, and only easier when on the right side; fæces blackish or clay-coloured, very offensive; urine high-coloured, and often depositing a lateritious sediment; depression of spirits, sometimes amounting to hypochondriasis; the pulse sometimes unaffected.

Now, I would ask any but a Don Quixote,—how he could dispense with mercury in the reduction of the liver, and cure of such a patient? We know that without saliva there can be no perfect digestion; and, till that be established, the secretion of mucus continues, and no amendment takes place. But when we administer pilula hydrargyri, soda, conium, hyoscyamus, taraxacum, with strict attention to the state of the bowels, and a proper mild nutritive diet, till the restoration of the salivary secretion, how the skin and sclerotic resume their natural colour, as well as the fæces and urine, the spirits their usual buoyancy, the stomach and lungs their healthy state, the liver its accustomed size, recumbency as easy on either side, and, in short, a perfect restoration to health.

Let us see what would be the result, in all probability, were mercury discarded? A functional affection of the liver would be converted to an organic one, and the consequence would be a miserable existence for the remainder of the short life of the patient.

All orthodox medical men know that mercury, like all other powerful articles of the materia medica, must be cautiously used, and that it is liable to the general rule, but that it is most indispensable and invaluable. So far mercury; one word on myalgia. Are we to infer, that muscle, abstractedly, is capable of motion or sensation? Neurology says no. I am, etc.,

Thomas Pope.

Cleobury Mortimer, Dec. 8th, 1860.

Medical News.

Royal College of Surgeons. The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on January 10th:—

Edwards, David Owen, Brompton, Middlesex; diploma of membership dated September 19th, 1828
Goodall, Abraham, Her Majesty's Indian Army; Dec. 28, 1827

Apothecaries' Hall. On Thursday, January 10th, the following licentiates were admitted:—

Butten, William S., Shaftesbury
Mead, Henry T. H., Canterbury
Wollaston, Thomas G., King's College Hospital

APPOINTMENTS.

Royal Army. The following appointment has been made:—

Wood, T., M.D., Staff-Assistant-Surgeon, to be Assistant-Surgeon 54th Foot, *vice* Youell, appointed to the Staff.

Royal Navy. The following appointments have been made:—

Baird, Wm. J., M.D., Surgeon (additional), to the *Victory*.
Clark, George, Esq., Acting Assistant-Surgeon, to the *Chesapeake*.
Dubuc, Emilius W., Esq., Acting Assistant-Surgeon, to the *London*.
O'Toole, W. H., Esq., Acting Assistant-Surgeon, to the *Chesapeake*.
Parr, James F., Esq., Acting Assistant-Surgeon, to the *Chesapeake*.
Sloss, Joseph, M.D., Surgeon, to the *Intrepid*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Barker, W. R. H., Esq., to be Assistant-Surgeon 9th Berks R.V.
Blackie, R., Esq., to be Assistant-Surgeon 15th Shropshire R.V.
Burkitt, T. W., Esq., to be Assist.-Surgeon 38th West Riding R.V.

Cochran, A., M.D., to be Assist.-Surgeon 15th Perthshire R.V.
Craine, R. E., Esq., to be Assist.-Surgeon 3rd Isle of Man R.V.
Fuller, T., Esq., to be Assistant-Surgeon 4th Sussex A.V.
Gill, H. K., Esq., to be Assist.-Surgeon 22nd Lancashire Artillery.
Hopkins, G. H., Esq., to be Assistant-Surgeon 40th Company Staffordshire R.V.
Jones, W. V., Esq., to be Assist.-Surgeon 3rd Merionethshire R.V.
Nunn, R., Esq., to be Assistant-Surgeon 7th Oxfordshire R.V.
Underwood, T., M.D., to be Assist.-Surgeon 1st Isle of Man R.V.
Weir, A., Esq., to be Surgeon 2nd Administrative Battalion Worcestershire R.V.
Woodman, W. R., M.D., to be Assist.-Surgeon 4th Middlesex R.V.

BIRTH.

Of a son, the wife of—
*Brown, George D., Henley-on-Thames, on January 11.

DEATHS.

Broadfoot. On January 12th, at 8, Talbot Square, aged 74, Esther, widow of the late Alexander Broadfoot, M.D.
Colborne. On January 14, at Chippenham, aged 25, Frances Rachel, youngest daughter of *William Colborne, Esq.
Conolly, William, M.D., at Bath, on January 10.
Goodchild. On January 11, at St. John's Wood, aged 68, Rebekah, widow of the late John Goodchild, Esq., Surgeon.
Houlton, Joseph, Esq., Surgeon, at 12, Blomfield Street, W., aged 72, on January 14.
Hunt. On January 11, at 23, Alfred Place, Bedford Square, aged 53, Martha Mary, wife of *Thomas Hunt, Esq.
Jackson, George, Esq., Surgeon, Church Street, Spitalfields, aged 68, on January 15.
*Kay, William, M.D., at Clifton, aged 54, on January 12.
L'Estrange, Francis R., Esq., Surgeon, aged 72, on January 14.
Northen, Francis H., M.D., Eccleshall, aged 89, on January 11th.
Painter. On January 15, at Bridges Street, W.C., Marianne, wife of Richard B. Painter, M.D.
*Plomley, Francis, M.D., Physician to the West Kent Infirmary, at Maidstone, aged 55, on January 9.
Prior. On January 11, at Bedford, Henry Morrice, second son of *C. E. Prior, M.D.
Taylor, A., Esq., Surgeon, 4, Spur Street, Leicester Square, aged 72, on January 13.

Royal College of Physicians. Dr. A. Smith was elected a member of the College on the 17th instant.

Universality of Scrofula. Dr. Gregory of Edinburgh has asserted as his belief that not a single family in Great Britain was exempt from scrofulous taint.

Hydrophobia. From the annual report issued by the General Hospital of Vienna, it appears that of 115 individuals who were bitten by rabid animals only 25 died from hydrophobia.

London Hospital. During the year 1860, 11,944 accidents have been brought to the London Hospital; of these 2143 were treated as in- and 9806 as out-patients. The number of accidents brought to the Hospital during the last nineteen years amounts to 174,694.

Academy of Sciences. Dr. Thomas Inman has forwarded a memoir on Myalgia to the Academy of Sciences, and desires the opinion of the Academy upon it. M. J. Cloquet was requested to examine the memoir, and if he thought well, to make it the subject of a verbal report. (*Gaz. des Hôpit.*)

Beneficence. The late Mr. Thomas Thornton, of Brunswick Square, Brighton, has bequeathed £4000 to various charities, not forgetting the medical institutions, having left £400 to each of the following, namely, King's College Hospital, the Sussex County Hospital, the Brighton Infirmary, and the Asylum for Idiots.

College of Physicians. The lectures at the London College of Physicians are to be delivered as follows during the present year. The Lumleian Lectures by Dr. Barker, Croonian Lectures by Dr. Guy, and the Gulstonian Lectures by Dr. Brown-Séquard. Short courses of lectures will also be given by Dr. Garrod and Dr. Lionel Beale.

Sick Soldiers from China. The first detachment of sick troops from China have reached the hospital, Chatham. The *Epsom* brings home nearly 100 sick and wounded. Six insane soldiers, who arrived at Fort Pitt with the invalids, were admitted into the lunatic hospital at that establishment. During the passage home one man of the 67th Regiment, and one orderly of the Medical Staff Corps, died on board.

St. George's Hospital. On Friday week a ballot took place at the Board-room of St. George's Hospital for the election of a gentleman to fill the vacant office of secretary to that institution. The only two candidates who offered themselves were Mr. Holmes and Major Lyon, the former of whom was elected by a majority of 19; the relative numbers of votes polled being 88 to 69, out of a constituency of upwards of 700.

Barnum's Country. The *New York Tribune* states that it is to receive over thirty-one thousand dollars for one year's insertion of a quack advertisement in its daily, semi-weekly, and weekly issues. It states that this will prove a provitable investment to the advertiser, in which case this enormous sum of money will, of course, be drawn from the readers of that paper, and be paid back to the quack, for his worthless preparation. The universal panacea now put forward is called the "Cephalic Pills".

Weight of Men. It is stated that 4369 men had been weighed at the Mechanics' Fair in Boston, and that their average weight was 146 lbs. 13 ounces. The mean weight of men in Belgium (Brussels and its environs), is 140·49 pounds. In France (Paris and the neighbourhood), the mean weight is 136·89 pounds. In England (taken at Cambridge, between the ages of 18 and 28), the mean weight was found to be 150·98 pounds. It would be a good idea, founded on something more than mere curiosity, to have a good set of scales used at fairs in all parts of the country.

Surgery among the Mormons. The Mormon theology contemplates the cure of diseases by miraculous interposition; hence the disciples of the healing art are not held in much estimation. The church authorities are exceedingly jealous at any attempt to cure by ordinary therapeutics, and denounce from the pulpit any invasion of their special province. Though they claim for the "laying on of hands" (cheirapsia) wonderful efficacy, the number of deformities, the result of malpractice, to be seen in any of the populous towns, rather indicates a necessity for the use of carnal means. The art of surgery is at a low ebb. (*American Med. Times.*)

The Army Hospital Corps. A committee has been appointed by the Secretary of State for War to consider and report on the organisation of the Army Hospital Corps, and to draw up a scheme for the establishment of general hospitals. It will be constituted as follows: Colonel Clark Kennedy, C.B., Commandant of Military Train; Dr. Mapleton, Deputy Inspector General; Dr. Sutherland, Sanitary Commissioner; Dr. Fyffe, Surgeon 5th Dragoon Guards; J. Scott Robertson, Purveyor-in-Chief. The committee hold their meetings at 6, Whitehall-yard, but they will move from time to time to the various stations to examine the general hospitals. (*Army and Navy Gazette.*)

Watering-Place in France. The town of Croisec, in France, is a very desirable watering-place, if we may trust its admirers:—"The inhabitants breathe a very pure air charged with saline particles; they have excellent food; their houses, built of granite, are large and excellently ventilated; the town is built along the harbour. No unhealthy manufactory is established there. It results from these advantages, that diseases are, comparatively speaking, very rare at Croisec, and life longer there than elsewhere. Octogenarians and nonogenarians are numerous there. There is, indeed, an old proverb, that at Croisec the men can never make up their minds to die, and as for the women, you must destroy them if you wish to be rid of them."

Hospital Charity. The Rev. Dr. Miller made the following sensible remarks at the last annual meeting of the Birmingham Hospital, *apropos* of special hospitals:—"The greater his experience as a clergyman among the poor, the more he was convinced that few things are so difficult as the wise administration of charity. In addition to a large heart and an open hand, it was desirable to have a very wise head; for when relief was indiscriminately distributed, they not only lost their money, which was the least part of the mischief, but they induced a very great social evil. Therefore, he thought it the duty of public men to impress on those possessing the will as well as the means to do good, the necessity of choosing proper channels for their bounty."

University College Hospital. On the recommendation of the Medical Committee of the Hospital, it was resolved to institute an office of assistant-surgeon for the Eye Infirmary of the hospital; and the intention was ordered to be advertised. On the application of students with a view to the degrees of B.A. and B.Sc. of the University of London, and on the recommendation of the Senate of the College, it was resolved to institute evening courses of instruction in animal physiology and zoology. Mr. John Marshall, surgeon to the hospital, author of the work and diagrams lately published under the title of *The Human Body, its Structure and Functions*, was appointed lecturer for the course on physiology, and Dr. Grant, Professor of Comparative Anatomy and Zoology in the college, was requested to undertake to give the lectures on zoology.

What is a Fact? There is an old saying, unanswerable as a fact; but it is an erroneous saying. On the contrary, nothing is more elastic, more convenient, and manageable, than a fact. The absurdest of doctrines are made to rest on facts. The reputation obtained by a pretended curer for cancer was founded on a fact. Thousands of facts are daily made use of to serve the purposes of the vilest quackeries. And, even amongst honest minded men, what errors are elicited from the observation of facts! As M. Velpeau lately said, at the opening of the clinique, "We judge of facts by the lamp of our intelligence; and this lamp is sometimes too small, sometimes too great, and is always fitted with glasses which modify the objects more or less; and then, as facts have many faces, we often see only that face of them which pleases us." Difficult indeed is the interpretation of facts! (*Journal de Médecine.*)

A Good Example. Twelve months since a few of the workmen employed at Messrs. Truman, Hanbury, and Buxton's brewery, conceived the idea of promoting a weekly penny subscription throughout that establishment in support of the Victoria Park Hospital. A meeting convened on the 10th of December, 1859, resolved to put the suggestion into practice, and appointed a committee for that purpose. The result of twelve months exertion is pre-eminently satisfactory. The committee has handed over to the hospital the sum of £63, and commences the new year with £6 in hand. It reflects the highest credit on the intelligence and benevolence of these men, that they have done this voluntarily without suggestion or inducement from those in authority over them; and it offers a noble example to the workmen in other employments which we shall be glad to see them follow. (*Standard.*)

Detection of Castor-oil in Volatile Oils. Mr. H. N. Draper recommends the following means of detecting the presence of castor-oil in the volatile-oils:—"Twenty drops of the suspected oil are placed in a small porcelaine capsule, and heated on a sand-bath until the odour of the oil is no longer perceived. To the residue—if there be any—add five or six drops of nitric acid, and as soon as the action has subsided dilute with a solution of carbonate of soda. If castor-oil be present, the odour of the œnanthylic acid will now be at once perceived, and once smelled is not likely to be mistaken for any other. As, however, it can hardly be compared to any other familiar odour, any one who has occasion to use this test will do well to make the experiment with castor-oil alone, and to acquaint himself with the peculiar smell. In this way Mr. Draper has been able to detect the admixture of five per cent. of castor-oil in volatile oils, and has no doubt even a much smaller proportion could be recognised." (*Dublin Med. Press.*)

A Professional Sketch in Detroit. Dr. Brodie, who details a case of hydrophobia in the *American Medical Times*, winds up his tale as follows:—"The case was one of great interest to the community, and, much to the discomfort of the patient, everybody wanted to see him, and would see him, both professional and layman. Everybody had a cure, and did not hesitate, in my absence, not only to urge the friends to administer, but even do themselves so. Two physicians, ignoring all professional ethics, taking advantage of my absence, declared the case one of delirium tremens, and administered remedies for the same. I cannot, therefore, let the opportunity pass by of calling the attention of medical educators to many of their graduates, who, although able to pass an examination, have not the first qualification to associate with gentlemen, whose principles will violate all courtesy, whose ignorance prevents them from either reading or comprehending the common rudiments of the English language, and whose prescriptions are a burlesque. It is high time a united effort were made to place our profession where it *has stood* in the past, and *ought* to stand in the present."

Deaths in London. The returns of deaths for the thirteen weeks that ended December 29th show that London was comparatively healthy during that period "Fineness of the weather", in the popular sense of the phrase, will hardly be admitted to have been the cause of the decrease of mortality. The weather was generally cold, frequently wet or dull, and before the year closed singularly severe. In the tables of the *Causes of Death*, the most satisfactory feature that presents itself is the reduction of the mortality from zymotic diseases. The decrease was found under small-pox, which was fatal last quarter in 74 cases, or about six weekly; under typhus and scarlatina, but principally the last. Measles exhibit an increase; so also do whooping-cough and croup, taken together. The deaths from diarrhœa were rather more numerous. Alcoholism counted 36 victims, instead of 48 and 70 in the two previous corresponding periods. Abstinence from intoxicating liquors, or, as it has lately been termed, *nephalism*, may have found in the dearness of provisions an ally whose support even the warmest advocates of temperance would probably not invite. There was apparently no undue tendency in the quarter to the fatal development of pulmonary diseases. Women who died after child bearing were 103; the average is 118. Twenty-eight deaths, nearly all those of children, were by homicide, chiefly murder; 63 were by suicide; 415 by accident or negligence.

Poisoning by Fungi. On the 25th October, 1859, some fungi were served up at the breakfast of the lieutenants and ensigns in garrison at Corte, which one of them had collected the previous evening in a wood of chestnut trees. Before preparing them for table, the steward had expressed his suspicions upon these fungi, but the officer insisted upon their being served up. Six officers ate of these fungi, which had preserved their natural colour, and all remarked that they were *very salt*. Towards eight o'clock in the evening, ten hours after their consumption, the six officers were seized with vomiting. All believed this was due to indigestion, and they did not think of the fungi till two hours afterwards. In a short time the vomiting was accompanied by colic.

A medical practitioner prescribed for each of the patients an emetic draught and purgative injections. The invalids had a bad night; the vomiting and colic continued, and they experienced cramp and a burning heat at the epigastrium. Five of the officers had then recourse to various empiric remedies, which were extolled in the country. One of them, better advised, followed a rational treatment. This officer alone survived the horrible catastrophe. Four of the invalids went into the hospital three days after the poisoning. The treatment adopted especially consisted in infusions of coffee, varied frictions, mustard poultices, and purgative injections. Three sunk at the end of three days. These invalids exhibited alternations of cerebral excitement and coma. M. Chevrel has published four interesting notices on this case of poisoning, which he attributes to the spurious Orange Agaric (*Agaricus muscarius* of Linnæus; *Amanita muscaria* of Greville). The Army Board of Health, in consequence of this unfortunate accident, have drawn up instructions relative to edible and poisonous fungi, which we think might be profitably consulted by pharmaceutists. (*Journal de Pharm.*)

ERGOTED GRAIN. Ergot is an affection of the seeds of many species of grass, including those which are cultivated under the common name of corn, by which they are converted into a hard, dark, spur-shaped body, generally much larger and longer than the seed, though sometimes, as in wheat, not differing very materially in size. Externally it is slightly rough, varying in tint from black or brown to purplish, with frequently a white mealy wash in parts, and at first, if not permanently, tipped with a little irregular scale-like process. When examined under the microscope it exhibits, on a section of this upper portion or the parts adjacent, little spore-like bodies seated on the tips of short straight threads vertical to the surface of the mass, which are supposed to have the office of impregnation, while within it consists of a white cellular mass rich in oil globules. Such is the condition of the plant the season in which it is produced, or till it has remained for some time on the ground, or is lightly covered with soil after the lapse of some months in a common garden-pot. A very curious change then takes place. A little pin-shaped purplish fungus sprouts in greater or less quantity from the sides, the head of which is studded with little receptables containing linear transparent sacs filled with thread-like sporidia. The ergot, then, as generally known, is merely a transitional form, or rather the first stage in the existence of the fungus, ending with the production of minute bodies, which are either reproductive, or, as is more probable, serve for the impregnation of the perfect fungus. The grains of a large variety of grasses are subject to become ergoted, and ergoted grains have also been observed in the genus Eleocharis, which belongs to the order Cyperaceæ. Amongst the grasses, besides the cereals, rye, wheat, and barley, may be mentioned couch-grass, darnel, rye-grass, cock's-foot, foxtail, and reed. The ergot of the reed, and blue melic (*Molinia cœrulea*) so common in moors, does not produce the same fungus as that of the other grasses just mentioned, and that again which springs from the ergot of the Eleocharis is specifically distinct. The seeds of the common reed are peculiarly subject to ergot, and the heads of flowers when blown off by the wind lie upon the damp soil for some months before the ergot is properly developed. The fungus of this ergot may be raised artificially by placing the head upon damp sand covered with moss, or if they are placed with the stalks constantly immersed in water the ergot will in time produce its fungus. If any of our readers wish to see the ergot of rye, barley, or wheat developed, they have only to cover them slightly with soil about the month of April, keeping it moderately moist with rain-water, and they will be pretty sure to have a crop. And they will raise exactly the same fungus from the ergot of rye-grass, except that in proportion to the size of the ergoted grain, the resulting fungus will vary in size and number. (*Gardeners' Chronicle.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.
TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.
WEDNESDAY...St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.
THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.
FRIDAY. ...... Westminster Ophthalmic, 1·30 P.M.
SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Medical, 8·30 P.M. Mr. H. Smith, "On the Nature and Treatment of the more Severe Forms of Stricture of the Urethra, especially where Incision has been previously resorted to."
TUESDAY. Royal Medical and Chirurgical, 8.30; Zoological.
WEDNESDAY. Society of Arts; Geological; Royal Society of Literature.
THURSDAY. Royal; Antiquarian.
FRIDAY. Royal Institution.
SATURDAY. Royal Botanical.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

S. P.—We beg to say, in answer to our correspondent, that we fully agree with him in his reasonable objections. We at the same time are pleased to assure him. that we shall shortly be able to remove the cause of his objections. He must recollect that the present Editor had only a few days grace in making his arrangements for starting a new series of the JOURNAL; and, under such circumstances, it may be readily understood that all was not attained that was intended and desired. As we have already said, however, we can promise our correspondent that he will in a short time find nothing wanting, either in the matter of type, paper, or size of the JOURNAL. The natural motto of all progress is change. And we trust that we may be continually passing through a series of progressive changes, adapting ourselves to the increasing wants of this advanced age.

RELIEF TO THE POOR.—SIR: I have been much surprised to note that amidst the various schemes which have been proposed for the managing of the distribution of relief to the poor, during the late inclement weather, none have included the services of our medical brethren. I should have imagined that there could have been no class of men in London more capable of rendering effective service in this respect. Sickness and poverty and want, as we only too well know, run hand in hand; and, moreover, a very large proportion of the ills which the medical officers of our dispensaries and the out-door departments of our hospitals have to combat, are derived from want of proper food. In such cases, food is much more requisite than medicine. Our medical brethren who attend these classes of people possess, as far as the sick poor are concerned, the necessary information for giving relief to the most proper recipients. There is no shamming disease with them. They know, from having frequently visited the abodes of misery, just where the abodes of real misery are. They see the family starving through the illness of the head of it. I hope you will call attention to this point.

Yours, etc., A DISPENSARY PHYSICIAN.

THE ELECTION OF SECRETARY TO ST. GEORGE'S HOSPITAL.—SIR: I trust you will not fail to mark with your disapprobation the conduct of the *Times*, in reference to the election of Secretary to St. George's Hospital. With regard to the merits or demerits of the gentleman elected, I know nothing, nor do I wish to touch on this point. But I believe every right thinking person will, with me, deem it scandalous, that a powerful organ of public opinion, like the *Times*, should allow an individual, merely because he has notoriously the ear of the *Times*, to bring broad accusations of jobbery and partiality against a large body of gentlemen, equally honourable, and as little fond of jobbery as himself. The Board of Governors of St. George's Hospital is an open Board, where every Governor may, on all occasions, boldly express his sentiments. Yet this is not sufficient for some minds. And thus, here is an individual who cannot lead the Board by the nose, uses his private influence to set the screw of the public *Times* to work upon the general body of Governors, to interfere with the election of an officer; and, on the very day of election, gets a letter put in the journal, to drive the men up to the poll. As I have said before, I know nothing of the merits of the case; but I rejoice to see that this scandalous use of a great immoral force has for once failed in its object—the election having been carried in the teeth of the *Times* and its private correspondent.

I am, etc., A Governor of St. George's Hospital.

[We, of course, like everybody else, have read the correspondence in the *Times* alluded to by A Governor. We thought when we read it, and we think now, very much as our correspondent thinks in reference to the behaviour of the *Times*. We trust, and in fact know, that our great medical charities are too well and too openly conducted to require the interference of that journal in their private arrangements. Certainly, when an institution is managed by an open Board of Governors, notoriously all men of the highest honour, the one-sided impugnment of their conduct by a single individual, used as an instrument to vitiate an election, by a public print, is without excuse.—Editor.]

The Drs. Keill.—Sir: James Keill, M.D., of Northampton, whose epitaph is given in your number for January 5th, was one of two distinguished brothers, and was born at Edinburgh 27th March, 1673. He received his general education in his native city, under the direction of the celebrated David Gregory, afterwards Savilian professor of astronomy at Oxford, from whom he would seem to have acquired that deep knowledge and taste for mathematics for which he became so greatly distinguished.

But little is known of his medical education. It is said, and I believe truly, to have been had abroad, and probably at Leyden. Wheresoever acquired, it was certainly of the best character. His first appearance in this country in a public capacity was as a lecturer on anatomy, in which science he was a proficient. Lectures on this subject he delivered with the highest applause, both at Oxford and Cambridge, and in 1698 his *Anatomy of the Human Body Abridged*, 12mo., issued from the London press. This became one of the most popular works of the time, and ran to numerous editions, the last (I believe) of which, the fifteenth, appeared in 1771, more than fifty years after its author's death. About the year 1700, Dr. Keill settled at Northampton, and in 1705 was created doctor of medicine by the University of Cambridge. He continued at Northampton, practising with marked success and a steadily increasing reputation, until his death from cancer of the mouth, in July 1719.

Dr. Keill's attainments as a mathematician and anatomist, and the mode in which he applied these sciences to the elucidation of medicine, are abundantly evidenced in all his writings. They are so correctly and happily expressed in his epitaph, that I can add nothing thereto. Dr. Keill's published views concerning the force of the heart's action, led to a controversy with Dr. Jurin, a profound mathematician and distinguished London physician, who died 22nd March, 1750, being then president of the College of Physicians. In this discussion, both parties did themselves great credit; and the "sermonum honos et vivax gratia," so much to be desired in all scientific contests, was admirably displayed. Besides the work on Anatomy, above mentioned, we have from Dr. Keill's pen:

"An Account of Animal Secretion, the Quantity of Blood in the Human Body, and Muscular Motion. 8vo. Lond. 1708"—a Latin edition of which, improved and enlarged, appeared in 1718 with the title: "Tentamina Medico-physica ad quasdem Questiones quæ Œconomiam Animalium spectant. Accessit Medicina Statica Britannica. 8vo. Lond."

"Essays on Several Parts of the Animal Economy. 2nd ed. Lond. 8vo. 1717."

John Keill, the elder brother of the preceding, who erected the monument in St. Giles' church, Northampton, although a doctor of medicine of Oxford (9th July, 1713), has no claim to notice as a physician. He is not known to have practised medicine, but was a most distinguished mathematician and astronomer. He was a voluminous writer, and a warm defender of Newton; and is said, in a course of private lectures which he delivered at Baliol College, Oxford, of which house he was a Fellow, to have illustrated, for the first time in this country, the doctrines of the *Principia*, by the experiments on which they are founded. In 1710, he was appointed to the chair at Oxford, which his friend and teacher, Dr. David Gregory, had filled—that of Savilian professor of astronomy. Dr. John Keill did not long survive his brother. He died of fever in September 1721, before he had completed his fiftieth year.

W. Munk, M.D.

January 15th, 1861.

BRITISH MEDICAL ASSOCIATION.

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members of the Association, shall be admitted a member at any time by the Committee of Council, or by the Council of any branch. The subscription is One Guinea annually, due on January 1st; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year.

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BOOKS RECEIVED.

1. Nature in the Cure of Disease. A Lecture. By J. Strachan, M.D
2. On the Origin of Species. By H. Freke, M.D.
3. On Diseases and Deformities of the Spine, Chest, and Limbs. By *Richd. Hughes, M.R.C.S., L.R.C.P.
4. Foundation for a New Theory and Practice of Medicine. By *Thomas Inman, M.D.Lond. Second edition. London: Churchill. 1861.
5. On the Signs and Diseases of Pregnancy. By Thomas Hawkes Tanner, M.D., F.L.S. London: Henry Renshaw. 1860.
6. A Glossary of Scientific Terms for General Use. By *Alexander Henry, M.D. London: Walton and Maberly. 1861.
7. Diagnosis of the Nerves of the Human Body. By W. H. Flower. London: Churchill. 1861.
8. On the Theory of the Ophthalmoscope. By George Rainy, M.D. London: Churchill. 1860.
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10. Clinical Surgery. The Surgical Diseases and Injuries of the Nose, Larynx, Thorax with its Contents, and of the Organs of Circulation. By Thomas Bryant, F.R.C.S. Part II. London: Churchill. 1860.
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Clinical Lecture
ON
PARALYSIS OF THE MUSCLES OF THE EYE.

DELIVERED AT THE LONDON HOSPITAL.

BY

JONATHAN HUTCHINSON, Esq., Assistant-Surgeon, and Lecturer on Surgery.

Gentlemen,—In the man before us, the upper lid of the left eye droops so much that it meets the lower one, and that the front of the globe is wholly concealed. He has not the slightest power of raising the lid. It is very rare that ptosis (such is the learned name for this symptom) is so complete as we here see it. Much more generally it comes before us as a mere dropping of the lid, with imperfect power of raising it; very seldom indeed do we see it in so extreme a state. If we raise the dropped lid, other very interesting conditions present themselves. Instead of looking forwards, the man's eye is directed out, and looks right away over its possessor's shoulder. If we look nearer, we shall notice that the pupil is much dilated, it being at least four times the size of the other. If we ask the man to look to the right, we observe his right eye pass easily outwards; the left, on the other hand, is merely liberated, so to speak, until it looks nearly straight forwards; but further than that he cannot draw it. If he tries to look upwards or downwards, the right globe obeys his volition, but the left remains quite fixed. Thus, then, we have proof that the inner rectus of the left eye, the superior and inferior recti, the levator of the upper lid, and the constrictor of the pupil, are all of them paralysed. All these muscles are supplied by one and the same nerve; and the case is, therefore, clearly one of complete paralysis of the third nerve or motor oculi. There is, as you are well aware, one other little muscle in the orbit which is supplied by the same nerve; namely, the inferior oblique. No doubt this muscle is also paralysed; but the fact that it is so is not easily demonstrable, since its action upon the eyeball is not so definite and conspicuous as are those of the other muscles. In addition to the muscles we have mentioned, there are two others in the orbit which move the eye—the external rectus and the inferior oblique. Neither of these is supplied by the third nerve, and neither of these is in this case affected. As you see, the external rectus is in full action; the man squints terribly; and, to prove that the superior oblique retains its activity, you have but to tell him to look downwards, when you will notice the globe to rotate slightly but decidedly on its axis, in a direction downwards and outwards. This rotation is the effect of the superior oblique.

Let us now see if the man's sight is impaired—if there is anything amiss with his optic nerve or retina. To gain this knowledge, we must not only cover his other eye, but we must supply him with a diaphragm, in order to get rid of the inconvenience of a widely dilated pupil; and it will be needful also to hold the object carefully in the right axis of vision, since the man has no power of adjusting the position of his globe. As Mahomet cannot go to the mountain, the mountain must be brought to Mahomet. It would take up time unnecessarily to go through this now; and so I may be content to state that, on trying him carefully yesterday, I ascertained that he could read ordinary type with tolerable ease. The retina is therefore, no doubt, in a perfectly normal state; and we have before us an example of complete paralysis of the third nerve pure and uncomplicated. It is, indeed, one of the instances in which morbid processes present us with a most interesting physiological experiment. If we had cut down upon the third nerve just before its entry into the orbit, and divided it with scissors, without any disturbance or irritation of the adjacent parts (an experiment, of course, quite impossible), we should then expect exactly the condition of things which we have here ready prepared to our hand. We will therefore not neglect our present opportunity. I shall ask you to look in some detail into the nature and real meaning of the various symptoms presented to us. The case, although, as I stated, in itself a rare one, will yet throw light on a large group of others, examples of which very frequently come under our notice. If we master the explanation of the symptoms in this man, our minds will in future be well prepared to investigate some of the very important diagnostic and prognostic symptoms presented by the eye in cases of injury to the head, in cases of apoplectic and other seizures, as well as in those affections in which ptosis or dilatation of one pupil indicate, it may be, either a slight rheumatic neurosis, or the supervention of important cerebral mischief. Several of those present will remember well the case of a man who was admitted a few weeks ago in profound coma, after a fall on his head. He had sustained a compound fracture, with slight depression of the right parietal bone. His left pupil was dilated, and his left eye divergent—symptoms which led us, first, to the knowledge that his left third nerve was paralysed; and secondly, in the absence of general hemiplegia, to the important inference that he had sustained a fracture of the base of his skull. This opinion I expressed at the time; and although, in the existence of a fracture superficially, I deemed it right to employ the trephine, it was with but little hope of benefit. The autopsy showed that the inference had been quite correct. But let us revert to our patient.

History of the Case. Alfred B., the man before us, is, as you see, a pale yellow complexioned man, of spare habit. His age is 29, his occupation that of a butcher; and, when at home, he lives at the healthy town of Dorking. He states that he has drunk rather freely, but avers that he has never had syphilis. He had gonorrhœa five or six years ago; but no bubo, rash, or sore-throat, followed it. He has never been liable to rheumatism, nor has he suffered from headaches. Two months ago, he had a bad cold in the head, attended with hoarseness and some cough. This lasted about a week, and pulled him down a good deal. He had, however, been well of it for a fortnight before he noticed his left eyelid to begin to droop. He considered himself in usual health when this came on, and he had with it neither pain nor ache in any part. His appetite, sleep, etc., remained just as they had been; and he had no cerebral symptoms whatever, excepting those of the third nerve, to which we have adverted. He describes the drooping of the lid as having come on gradually, and several days were occupied before it was complete. At this time—*i. e.*, before the pupil had been covered by the lid—he saw objects double.

He first came under my care on November 18th, three weeks from the commencement of his symptoms. His state then was exactly what we now see it. We have used blisters to the temple and neck, and prescribed the iodide of potassium internally; but hitherto with but little benefit. He cannot yet raise his lid at all; but he decidedly possesses a slight power over the inner rectus, which was not present at first, and which is a hopeful symptom as regards the ultimate result. I may state that, during the fortnight he has been under my notice, his tongue has been clean. We have examined his urine, and find it rather pale, of low specific gravity, and free from albumen. There is, therefore, apart from his general cachexia of appearance, not a single constitutional symptom for us to take hold of. On what are we to suppose that the paralysis depends? We are obliged to consider the cause as in all probability mechanical—that is, pressure on the nerve-trunk; for the suspension of function is too complete for us to refer it to mere functional interruption of endowment. In all probability, the nerve is so pressed upon in some part of its course that it is as much interrupted in its continuity as if it were cut across. The trunk of the third nerve is not a long one; it emerges from the brain on the inner aspect of the crus cerebri, being a firm white cord, about the thickness of three pins. It passes forwards between the superior cerebellar and posterior cerebral arteries, and, after a course of about an inch, enters the outer wall of the cavernous sinus, which it finally leaves to gain the orbit through the sphenoidal fissure. Before entering the orbit, it has already divided into two branches. It is clear that the disease in this instance is not in the orbit; since, if it were, it would probably implicate only one of the two divisions of the trunk, whereas all the muscles are equally paralysed. Any tumour, such as aneurism, existing in the cavernous sinus might press upon the trunk of the third nerve, and arrest its function; but it is improbable that, in doing so to the effect of complete arrest, it would fail also to press somewhat on the fourth, and on the ophthalmic division of the fifth, both of which lie close to the third. If it were an aneurism of the carotid artery, the sixth nerve would be the one most likely to be pressed upon. Such has, indeed, been the clinical fact in several of the cases of this lesion which are on record. Now, in our case, the third alone is affected. It is probable, therefore, that the point at which the nerve is compressed is not in the cavernous sinus. We have then left the tract intervening between the sinus and the crus cerebri; and lastly, the crus itself, and the tract of brain-substance through which the nerve-fibres pass to their deep origin. It is improbable that there is any disease in the substance of the crus, such as softening blood-clot or tumour; because, if there were, there ought certainly to be symptoms of cerebral disease more complex than the single one of paralysis of the third nerve. We come, then, by the process of exclusion, to the opinion that the tract of nerve between the crus cerebri and the cavernous sinus is the one in which, in all probability, the lesion exists. In this part, the nerve is isolated, and as it were free in the cranial cavity, invested only by its own sheath of arachnoid. It is possible that blood may have been effused within this sheath, thus compressing the nerve-tubules; or the effusion may not have been blood, but some inflammatory material. The latter hypothesis I take to be the more probable, because the symptom supervened slowly, not all at once, as it might have been expected to do if extravasation had occurred. This of course is, to a large extent, hypothetical reasoning; but it is necessary to go through with it, because, irrespectively of the satisfaction there is in gaining a clear and definite hypothesis, it is needful that we should do something in the way of treatment; and it is better that our remedies should be directed by reasonable hypothesis than by mere haphazard. Amongst the causes which induce effusions of lymph within the sheaths of nerves, the syphilitic diathesis is undoubtedly by far the most common. Local rheumatism, or more properly, what is known as "catching cold", is probably the next in frequency. Now, although the man in the present instance denies having had syphilis, yet it is still quite possible that he may have had it; and the treatment which I have adopted is one which keeps in view this possibility, whilst it is also directed against a rheumatic element, should such exist. There is no remedy, next to mercury, so efficient in procuring the absorption of lymph, syphilitic or otherwise, as iodide of potassium. In the cachectic state in which the man is, we could not think of mercury; and I have, therefore, ordered him five-grain doses of the iodide, in combination with tonics, three times daily.

We will now direct our attention to the phenomena presented by the girl Ann Tylor, who is now before us.

She came to me in April last, with the history that she had never had anything amiss with her eyes until the previous Thursday. On that day, she had accidentally received a blow from a man's elbow on the temporal region, not far from the outer angle of her right eye. It caused her no symptoms at the time, but the next day she found that she saw double.

Her objective symptoms at the time of her admission were almost exactly what you to-day (six months later) see them. She had simply a convergent squint. That this squint was due to paralysis of the right external rectus was evident; because, when directed to look towards her right shoulder, she was obliged to turn her whole head, being unable to direct her right eye outwards. She saw double whenever objects were presented to the right side, not when straight before her or to the left. With a candle in a dark room, however, she saw double, even when looking straight forwards. The two images seen by the respective eyes were seen on the same side; that is, the clear and definite image seen by the left eye was on the left side of the blurred and indistinct image seen by the right eye on the right. This condition of things still exists, and we can easily demonstrate it by the use of a coloured slip of glass. These symptoms are, indeed, the exact reverse of those presented by the man; the squint is inwards instead of outwards, there is no drooping of the lid, and no dilatation of the pupil.

Asking you to keep clearly in mind that the squint which exists in the two patients before us is essentially different from that form for which you so frequently see operations performed, that these are cases of paralysis, whereas the others are cases of spasm, I will now make a few remarks on the special symptoms.

You will often hear ptosis spoken of as if it were a special disease in itself. Remember always that it is simply an indication of paralysis of the third nerve; and whenever you observe it inquire about double vision, and notice whether the pupil be dilated and the eye thrown outwards. In the same way, never, when a patient tells you that he sees double, be content with a surmise that he has something amiss with his brain, or that his liver is out of order. See if other symptoms be not present, closely related to it in their cause. Keep the fact before you that double vision is not caused by brain mischief, but by the altered direction of one of the eyeballs. If one of the eyes is straight and the other oblique, it is impossible but that the patient should see double, however sound his brain may be. It is quite true that this altered direction of the globes may itself be, and mostly is, due to cerebral causes; but still very often it is not so, and the accuracy of your diagnosis will be much aided by your appreciating clearly the several intermediate conditions by which it is produced. The theory of double vision is simply this. Under usual circumstances, an image of every object we look at is formed upon the retina of each eye; but we do not see two objects, because the images are formed upon corresponding parts of the retinæ in the two eyes, *i.e.*, upon the yellow spot in each. Let one eye, however, be thrown out of its normal axis, that is, let it squint, and at once the images are formed on non-corresponding parts of the retinæ, and the mind perceives them as two. When two are seen, you will always find it the case that one is clearly seen, the other much less so; the reason of which is that the eye which looks straight receives its image upon the sensitive yellow spot, the other upon some outlying part of the retina which is much less sensitive. The less the extent of the squint, the greater the trouble to the patient from double vision, because the image in the squinting eye is formed very near to its yellow spot, and is seen more clearly, and therefore more confusingly, than if it were further off. Then, too, when the squint is slight, the patient sees the objects almost close together, perhaps overlapping each other, and this is much more confusing than if one were seen at a considerable distance from the other. It was in this condition that Burns describes himself to have been, when returning home from the public-house, and looking at the moon,

> "To count her horns wi' a' my power,
> I set mysel;
> But whether she had three or four,
> I cou'dna tell."

That is, the want of correspondence between his two eyes was very slight, and the two images of the moon were formed on his two retinæ very near to each other. Had they been further off he would have seen two moons distinctly, and would have had no difficulty in telling the number of the horns of each. And this leads me to advert to the ordinary causes of double vision. The symptom is very common in the early stages of intoxication, and in this instance, as in almost all others, is due to a want of parallelism between the two globes. The first result of alcoholic poisoning is to prevent the normal coordination of the muscular system; a fact which is made patent in the reeling, uncertain gait, the thick voice, and expressionless features. It is not surprising that this want of coordination should extend to the muscles of the eyeball. In the first stage, a vigorous voluntary effort is quite competent to overcome the defect, and the man who is just beginning to notice an appearance of two flames to the candle on the table can, by a little straining, adjust his eyes and dispel the illusion. If he take more of the poison, the result will, however, in all probability be, that double vision, for the time irremediable, will ensue. A more advanced stage still will be the entire suspension of visual power. The two convivial M.P.s who walked into the House after dinner presented illustrations of these two stages—

> "I cannot see the Speaker, Hal, can you?
> Not see the Speaker! bless you, I see two!"

Double vision may, however, depend upon any cause affecting the nerves of the eyeball; and it is to the discovery of which nerve is involved that your investigations must be directed. A young lady of delicate aspect was brought to me one morning with the history that, while sitting in chapel, after having been several hours without food, and feeling much fatigued, she had suddenly observed that there appeared to be two preachers. I found that her left upper lid drooped, and that her left pupil was rather larger than the other. There was no perceptible squint. It was clear that in this instance the third nerve was affected. Not unfrequently in these cases the degree of obliquity will be so slight that you can scarcely observe any squint. As I have explained, the slighter the degree of squint, if there only be a squint, the more troublesome will the double vision be. If neither squint nor ptosis be noticeable, you may be puzzled to say which is the affected eye, and whether the external or internal rectus be defective. Take your patient into a dark room, and let him look at a candle. Then hold a slip of coloured glass before the left eye, and ascertain whether he sees the coloured image on the left of the uncoloured one. If he does so, the want of parallelism is inwards, and it is the sixth nerve which is paralysed. If, on the other hand, the images are seen crossed, the squint is convergent, and it is the third nerve which is diseased. A good rule for you to remember this by is, that it is the reverse of what you would have expected; black is white, and white is black. When a man squints crosswise he sees the two objects parallel, but when he squints outwards he sees them crossed. If you will try presently with the prisms on the table you will soon see that this is so, but we need not stop at present to explain the optical reason.

You will ask why, if the obliquity of one of the globes causes double vision, do not those who squint always see double. The fact that they do not in ordinary cases is undoubted. I reply that it is a mere matter of habit. A patient with an oblique eye learns to neglect the impression formed upon it, and attends only to that seen by the well-directed organ. Thus, a recently acquired squint always causes double vision, but in a short time it is not noticed. When we operate for squint, the patients almost always see double for a week or two afterwards; because the eyes, although nearly restored to parallelism, have not been exactly so, and the patient requires to get used to their new position. You may always assure the patient in such a case that his annoyance from this cause will pass off.

A very interesting experiment may be tried in the artificial production of double vision by the prism, which depends upon the fact that you cannot see double with one eye only. Soldiers, wishing to obtain their discharge, sometimes feign blindness of one eye, and it may be very difficult to tell whether their assertion is true or otherwise. If, without appearing to doubt it, you place a prism and a piece of coloured glass before the sound eye, and inquire as to double vision, you will get the information you want. If the amaurosis is real, but one object will be seen, and that coloured; and if the man complain of seeing two, it is quite certain that he has visual power in both eyes. You may, indeed, ascertain whether his sight is good or imperfect in the eye which he feigns to be blind, by getting him to describe the degree of distinctness with which he sees the uncoloured image as compared with the other, the uncoloured one being, of course, the image seen by the eye he professes to be blind of.

As to the dilatation of the pupil in the case of the man, it depends upon suspension of functions of the sphincter muscle of the iris consequent on paralysis of the third nerve. It is a tolerably constant symptom in association with ptosis and eversion of the globe, but is not often seen to such a degree as we have it here presented.

A Lecture
ON URINARY CALCULI.

BY

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[*Concluded from p. 59.*]

On the Importance of the Administration of increased Quantities of Fluids in certain Calculous and other Affections.

I have already adverted to the importance of increasing the quantity of fluid taken by persons who suffer from certain varieties of urinary deposits. This principle has been fully recognised by Prout and many practical physicians who have had experience in treating cases of this class; but the remedy, perhaps from its very simplicity, has certainly not received the attention at the hands of many practitioners that it deserves. There are conditions of the system which are very much influenced by the dilution of the blood, and many of the chemical decompositions going on are promoted by an increase in the quantity of fluid. Some changes will not take place unless the solutions of the substances be very dilute. Many comparatively insoluble matters are slowly dissolved away by the frequent renewal of the fluid in contact with them. Even silica is capable of being dissolved in water; and it is from a solution containing so slight a trace that the substance can only be detected at all by operating upon very large quantities, that the whole of the silicious matter contributing in so important a degree to give firmness to the stems of grasses is deposited. The amount of water that must pass through the tissues of the plant during its growth, and give up its silicious matter, must be enormous, since the quantity dissolved in each pint of fluid taken up by the roots is so very small. On the same principle, by causing much liquid to traverse the tissues of a living animal, comparatively insoluble substances may be washed out. It is doubtful if that abundant deposition of urate of soda which is from time to time met with in almost all parts of the body, in certain cases, would have occurred at all, if the fluids had been constantly maintained in a proper state of dilution; and, when these crystals have been deposited, we endeavour to remove them, or prevent further deposition, by diluting the fluids of the body, and by endeavouring to increase the solubility of the urate. We are perhaps too apt, in many chronic cases, to put patients upon a plan of treatment for so short a time as a few days or weeks; and our patients are often unreasonable enough to expect that remedies will remove in a week matter which has been slowly accumulating perhaps for years. It is chronic cases of this kind which receive such real benefit from the comparatively prolonged course to which they are subjected in a German bath or hydropathic establishment; and it too often happens that, in endeavouring to perform quickly by remedies that which it is only possible to effect by giving large quantities of fluid during a considerable period of time, we disappoint ourselves and our patients; and perhaps in the end they attribute to some quack remedy or system, to which they have subsequently had recourse, a favourable result which is really due to the water they have drank and the hygienic rules to which they have been subjected, instead of to the nostrums they have swallowed.

In certain case of gout, in chronic rheumatism, and in many cases where uric acid and urates are constantly deposited in the urine or in the tissues of the body, the most important of all things is to ensure the thorough washing out of the system. Exercise when it can be taken, hot baths, Turkish baths, etc., by promoting sweating, excite thirst; and thus more fluid is ingested, which is soon got rid of by various emunctories, carrying out with it insoluble substances, the fluid removed being soon replaced by a fresh quantity. In the frequent repetition of these processes from time to time, a vast quantity of fluid is made to pass through the body, with the most beneficial effect.

You would be surprised how very little fluid some persons take, as a rule; and this fluid, small as it is, is often saturated with soluble substances. The fluid thus introduced is, in many persons who live well, barely sufficient to hold the various compounds in solution while undergoing chemical change. Many dislike to drink water, and not a few have a strong prejudice against it; and these are often the very individuals whom we find suffering from gout, rheumatic pains in the muscular and fibrous tissues, and various forms of urinary deposits. They will receive the greatest benefit from moderate sweating and alkalies dissolved in a large quantity of water. You will seldom find difficulty in prevailing on patients to take Seltzer, Vichy, or other alkaline waters daily, although it would be useless to recommend them to take pure water. They can take them with their wine at dinner, the last thing at night, and perhaps the first thing in the morning. People who live well, or rather too well, will soon find out that they must continue this plan, and take now and then small doses of alkalies. It is quite superfluous for me to enter into the minute details applicable in individual cases; but I cannot too strongly recommend you to study very carefully the different symptoms in cases of this class; for I feel sure that much permanent relief may be afforded such patients by explaining to them the importance of constantly attending to simple rules based on the principles to which I have adverted. Although I may have been somewhat tedious, I feel sure that you will not think that I have dwelt longer on these points than their practical importance demands; and I am convinced that we shall practise our profession with greater advantage to our patients, and advance its interests more, by studying carefully the nature of the actual processes going on in disease, and considering how these processes are to be modified by simple means and a few remedies whose action is certain and well understood, than by hunting for new specific medicines, or combining together a great number of compounds, many of which are completely modified as soon as they enter the stomach, and are certainly destroyed long ere they reach the part of the organism where we desire that they should exert their specific influence.

On the Methods of Dissolving Urinary Calculi. I can only offer a very few remarks on this important and interesting subject. Many of the observations which I have made with reference to the prevention or removal of urinary deposits are also applicable to calculi of allied composition. When a uric acid or urate of ammonia calculus, for instance, has been deposited, it may be dissolved, or its increase may be prevented, by producing alterations in the chemical composition of the urine. This may be effected by alterations in diet, and by the administration of various remedies, especially alkalies and the salts of the vegetable acids.

It is possible also in certain cases to dissolve the stone by injecting solvents into the bladder. In many cases, however, all our attempts to remove the stone by effecting its solution will be ineffectual, and we shall have to call in the assistance of the surgeon, who may remove the stone entire by lithotomy, or may crush it into several small pieces, which escape by the ordinary channel.

Mere dilution of the urine will sometimes exert a considerable influence upon a calculus; and it is possible that some calculi may have been entirely dissolved in this manner. An acid state of urine would tend gradually to dissolve a phosphatic calculus; and it is very possible that, if a feebly alkaline condition of the urine could be maintained for a considerable time, an impression might be made upon calculi composed of different forms of urates, or even upon an uric acid calculus. The irregularities often seen upon the surfaces of such calculi have been very properly termed "water-worn", and clearly indicate that the urine has exerted, for a time at least, a solvent action. Although in certain cases it would undoubtedly be right to adopt for a time treatment of this kind, we must not look forward to the result with any great degree of confidence; at best, such changes are doubtful, tedious, and very uncertain.

Many attempts have been made to dissolve the calculus by injecting fluids, which exert a solvent power upon the stone, into the bladder. The most convenient plan is to inject the fluid through a double catheter for half an hour every two or three days, or more frequently. Dr. Willis has recommended that the fluid should be placed in a reservoir at a sufficient height above the patient, and connected with the catheter by a tube provided with a stop-cock, by which means the flow of the solvent may be carefully regulated. In carrying out this plan, it is very important that the solution should be so weak as to prevent all chance of the mucous membrane of the bladder being injured. Sir Benjamin Brodie showed that phosphatic calculi might be greatly reduced in size, or entirely dissolved, by injecting a weak solution of nitric acid (2 to 2½ minims of strong nitric acid to an ounce of distilled water). Such a solution would also act very favourably in removing the sharp edges of fragments remaining in the bladder after the operation of lithotrity.

The objection to the use of alkalies in attempting to effect the solution of uric acid or urates is, that the phosphates are precipitated from the urine, and the calculus protected from the further action of the solvent.

The most ingenious plan for dissolving calculi was that proposed some years since by Dr. Hoskins, who employed a weak solution of acetate of lead (one grain to the ounce) with a mere trace of free acetic acid. With a phosphatic stone, double decomposition occurs. Phosphate of lead, in the form of a fine granular precipitate, and an acetate of lime and magnesia, are formed. The solution, it need hardly be said, does not produce any irritation or unfavourable action upon the bladder.

On Dissolving Calculi by Electrolysis. Attempts have been made to disintegrate and effect the solution of calculi in the living body by the aid of galvanism. MM. Prevost and Dumas (*Annales de Chémie*, vol. xxiii, p. 202, 1823) employed electricity for the purpose of disintegrating phosphatic calculi, by the mechanical action of the gases set free in the electrolysis of water; but only a grain per hour was thus removed. The *solution* of the calculus was not attempted in those experiments. Dr. Ludwig Melicher (*Oesterreich. Medicin. Jahrbuch*, 1848, vol. i, p. 154) tried to dissolve a calculus by the aid of electricity. It is said that two experiments on the living body were successful. (Quoted by Dr. Bence Jones).

The latest, as well as the most successful, efforts have been made by Dr. Bence Jones, who employed a solution of nitrate of potash, and decomposed this by the aid of a powerful galvanic battery. The nitric acid set free at the positive electrode would decompose the uric acid exposed to its influence, and the potassa evolved at the negative electrode would dissolve it, so that an uric acid calculus placed between them would be disintegrated at both points. The battery employed was from five to twenty pairs of Grove's plates. From 2 to 9 grains of uric acid calculus were dissolved per hour at the temperature of the body. Of oxalate of lime, ½ grain to 2 grains per hour only were dissolved. The action was four times as slow as upon uric acid calculi. Of oxalate of lime and uric acid, in alternating layers, 4½ to 5 grains were dissolved per hour. Of phosphatic calculi upwards of 25 grains were dissolved per hour.

Lithotomy and Lithotrity. This is a part of the subject which I am quite incompetent to discuss, but there are one or two recent modifications in the operation to which I may be permitted to advert very briefly. The operation of lithotomy which is usually performed by most surgeons in the present day is the lateral one. For a discussion of the various important points connected with this operation, I must refer you to Professor Fergusson's treatise on *Practical Surgery*.

Some time since, the median operation was performed with considerable success by Mr. Allarton. Its principal advantages seem to be, that the levator and prostatic capsule and plexus escape injury, while the course into the bladder is most direct. There is also the advantage, that the knife is not used either to notch the prostate or to open the bladder. On the other hand, there seems to be considerable chance of injuring the ejaculatory ducts; and a surgical friend tells me that there is a want of space in manipulating with the forceps, and in seizing and extracting the stone, and that there is also some risk, especially in children, of injuring the bulb of the urethra or the rectum. This operation is described in the *Lancet*, 1859, vol. i, page 122. See also Mr. Allarton's work on *Lithotomy Simplified*. London: Ash and Flint. 1854.

In connection with the subject of lithotomy, I may remark that, in a recent improvement in the manner of carrying out the lateral operation, by Mr. Wood, the injurious effects which sometimes result from the division of the prostate and levator ani with the knife are altogether avoided. Mr. Wood employs a staff composed of two blades, which can be separated from each other while the instrument is held in position. Dilatation of the urethra is readily effected by allowing the finger to slide in between the blades. In the single case in which this operation has been performed in the living subject, it seemed to have succeeded admirably (*Med. Times and Gaz.*, Dec. 22nd, 1860).

The principal advantages of this over the ordinary lateral and median operations respectively are that, as the knife does not enter the bladder at all, neither the prostatic veins nor the fascial capsule are injured, nor can the ejaculatory ducts be cut. The levator ani cannot be divided, and all chance of the extravasation of urine into the pelvic areolar tissue is avoided. The form of the external incision is such that more room is given than in the ordinary operation, while injury to all important vessels and other structures is avoided. By this proceeding, the dilatation necessary for the extraction of the stone is much more easily effected than in the median operation.

Of late years lithotrity appears to have been carried out very successfully in numerous cases in which the operation of lithotomy would have been practised formerly. The number of fatal cases resulting from lithotomy is considerably greater than that obtained from an analysis of the cases of lithotrity to which I have been able to refer. Neither does it appear that stones of very large size may not be crushed with safety; and, as far as I can learn, setting aside a few exceptional cases, it would seem that lithotomy afforded but a poor chance of safety where lithotrity could not be confidently recommended. These remarks, I need hardly say, apply only to adults. In children lithotomy is so safe an operation, while the small size of the urethra and other circumstances are unfavourable to lithotrity, that it is not likely that surgeons will have recourse to any other proceeding.

The experience especially of Sir Benjamin Brodie, Mr. Charles Hawkins, and Mr. Prescott Hewett has proved that, when performed with care, lithotrity is a most successful operation. Mr. Hawkins tells me that he has operated with success even in cases of stricture and irritable bladder, and has performed lithotrity where lithotomy could not have been undertaken. (See a case reported in the *Transactions* of the Royal Medical and Chirurgical Society for 1859). On the subject of lithotrity, I must refer you to Sir B. Brodie's paper in the twentieth volume of the *Transactions* of the Royal Medical and Chirurgical Society, in the concluding paragraph of which are these words, "My own experience has certainly led me to the conclusion that lithotrity, if prudently and carefully performed, with a due attention to minute circumstances, is liable to a smaller objection than almost any other of the capital operations of surgery."

Curious Marine Phenomenon. Captain Trébuchet states that on the night of August 26th, 1860, while tacking to reach Amboyna, lying at about twenty miles E.N.E., he and his crew witnessed the curious spectacle of the Milky Sea, which the Dutch call the Winter Sea, because both the sky and the waters present the appearance of fields covered with snow. The phenomenon lasted from seven p.m. until the return of daylight. They at first attributed it to the reflection of the moon, then only three days old; but, as the appearance continued after the moon had set, this explanation had to be discarded. A bucketful of sea water being drawn up and examined, it was found to contain about 200 groups of animalculæ of the same thickness (that of a hair) but of different lengths, varying between one and two-tenths of a *millimètre*, and adhering to each other by tens and twenties, like strings of beads. These insects emitted a fixed light similar to that of the firefly or glow-worm; and it was admitted on all hands that the white appearance of the sea could only be attributed to these minute creatures, the numbers of which must therefore exceed all imagination.

Illustrations of HOSPITAL PRACTICE: METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

IDIOPATHIC NEPHRITIS.

Under the care of E. H. Sieveking, M.D.

The interest attaching to the following case consists in the fact of its occurring at an unusually early age. Calculous nephritis and the nephritis of scarlet fever are met with at all ages; but acute idiopathic and desquamative nephritis is more commonly due to causes that affect mainly the adult or the later periods of childhood.

Eliza N., aged 4. Feb. 28th. Never was seriously ill, not having had scarlet fever, measles, or hooping-cough. A week before applying for advice, she was noticed to have ascarides; but she has only appeared ailing for three days. Two days ago, she had a swelling at the right side of the neck. Since yesterday, the urine has been dark brown, and contains a large quantity of albumen. There is no scarlet-fever rash. The bowels are open; the tongue white; pulse 120; skin hot. There is a hard tumour, apparently glandular, at the right angle of the jaw, not very painful.

℞ Hydrar. chlorid. gr. ij; pulv. jalapæ gr. vj. M. Ft. pulvis statim sumendus.

℞ Sodæ carbonatis ʒiij; spir. ætheris nitr. ʒiv; liquor. ammon. acetat. ℥j; syrupi ℥j; aquæ ℥vj. M. Sumat cochleare medium tertiâ quâque horâ.

March 2nd. Yesterday the urine was much clearer, and contained little albumen; to-day, it contains rather more. The patient is rather drowsy. Urine scanty; bowels open. The tumour of the jaw is smaller and softer.

March 3rd. She is less cheerful; the urine still dark and scanty; the bowels open. There is much thirst.

℞ Potassæ nitratis ʒij; oxymellis scillæ, syrupi glycyrrhizæ, āā ʒvj; aquæ carui ℥ivss. M. Sumat ʒij tertiis horis.

Habeat pulv. rhei et magnes. gr. x alternâ mane.

March 4th. Since yesterday, there has been constant sickness, both after food and medicine. The bowels are well open. She is still rather drowsy, but appears more lively this morning. There is no œdema of feet, face, or abdomen. The urine, which is scanty, contains a large amount of lithates and some albumen, though less of the latter than at the first examination. The urine obtained for examination was only passed after much coaxing, not from dysuria, but from apparent insensibility; it is strongly acid; and the sediment is found, under the microscope, to contain much renal epithelium and tubular casts.

Applicenturh irudines quatuor lumbis, regioni renum.

March 7th. The urine is still turbid, but contains no albumen; it is more copious, and of pale yellow colour. The microscope shows the sediment to consist of little else than uric acid crystals, and a very small number of casts enveloping small corpuscles, apparently pus. The sediment looked quite flocculent; still it contained little epithelium, and the quantity of crystals was quite surprising.

Repetatur mistura, addendo tincturæ ferri muriatis ʒj.

Repetantur balneum calidum et pulvis.

March 11th. The urine has a slight flocculent sediment, leaving the supernatant fluid clear, and more normal in colour than it has yet been. There is no trace of albumen. The urine is more copious. The sediment consists almost exclusively of minute lozengeshaped crystals of uric acid, with a very small number of fibrinous casts of the tubules. The crystals present a linear arrangement, of the size of a kidney-tubule, and were closely packed, as if formed in the tubules before being discharged. The child was much better, though still with a poor appetite.

℞ Tincturæ ferri muriatis ʒij; syr. glycyrrh. ℥j; inf. quassiæ ℥v. M. Sumat ʒij ter die.

Repetatur pulvis.

Tonics, as the syrup of iodide of iron and cod-liver oil, were continued a little longer without a relapse, until the cure was established.

SOUTH LONDON OPHTHALMIC HOSPITAL.

TRAUMATIC OPHTHALMITIS: ABSCESS IN THE VITREOUS CHAMBER: DETACHMENT OF RETINA: REMOVAL OF EYEBALL.

Under the care of J. Zachariah Laurence, Esq.

A little boy, five years of age, was brought to the South London Ophthalmic Hospital on April 14th, 1860. On the afternoon of the 11th, he was watching a man shooting for nuts at a target at Stepney fair, when he received the charge of the gun on his left eye. This charge consisted of a piece of steel wire about an inch long, sharpened to a point, and mounted into a piece of cane. The boy said the wire struck him just below the lower eyelid; but there could not be discovered any traces of the injury there. On the upper part of the cornea, however, was evidence of a wound in the shape of a white cicatrix. The cornea generally was somewhat cloudy; the pupil was one confused hazy disk, completely obscuring the deeper structures. The external tunics are highly injected. There was great lacrymation, intolerance of light, and some pain. Mr. Laurence wished to take the boy into the hospital, but the friends preferred his being treated as an out-patient. He was ordered leeches to the temple, warm fomentations, and belladonna ointment round the eye. By the 18th, the cornea had cleared; but the anterior chamber was centrally occupied by an opalescent substance, which concealed all but the external margin of the iris. Slight swelling of the eyelids and chemosis had ensued. His bowels being costive, he was ordered two grains of calomel and a scruple of rhubarb immediately. The warm fomentations were continued.

On the 21st, the boy was again brought to the hospital. The case had now assumed a most formidable appearance. The eyelids were swollen out into a protruding tumour of the size of a small Tangerine orange; they were tense, glossy, and livid. The narrow interval between the two eyelids was occupied by fluid and dried pus, in the midst of which the cornea could be partially seen. The patient was put under chloroform. Mr. Laurence, in the first instance, made several exploratory punctures around the eyeball into various parts of the orbit, cutting into the conjunctiva; this was found to be extraordinarily thickened, and of a brawny consistence, by interstitial deposit of plastic matter. The eye having in this way been partially peeled of its shell of hard chemosed conjunctiva, it became evident that the eyeball was itself greatly enlarged (to about the size of an agate marble), and moreover presented to the touch an unusual degree of elastic tension. Mr. Laurence therefore cautiously explored it with the point of a bistoury; and, some pus exuding, the incision was at once enlarged, and very nearly two drachms of thick yellow pus evacuated; and at last a membranous body, like an hydatid, stained and infiltrated with pus, shot out. The eyeball being thus completely disorganised, Mr. Laurence deemed it advisable to remove it. The operation-wound very soon granulated up.

Dr. Bader, of the Royal London Ophthalmic Hospital, examined the eyeball. He stated that the hydatid-like body was "the pus-infiltrated retina"; further, that "a thick layer of lymph was deposited upon the whole of the inner surface of the choroid; the latter was sacculent, and thickened by greyish films of fibrine. The sclerotic was thickened, and numerous adhesions must have existed between it and the orbital tissue."

The above is a case of that inflammation of all the textures of the eye which is known to oculists as *ophthalmitis*, and is one of those rare instances of eye-disease which may actually kill the patient. Mackenzie, in his elaborate *Treatise on the Eye*, says that, "if the eye is not opened, the patient is apt to fall into a state of coma, from which he does not recover." In a fatal case, the morbid changes in and around the eyeball were very similar to those observed in the present instance. There, too, "the inner surface of the choroid presented traces of fibrinous effusion, and was completely detached from the retina by a collection of purulent matter." Mackenzie further states that "the causes of idiopathic ophthalmitis are often obscure; slight injuries, such as simple puncture, may produce the disease in some particular states of the constitution." In our case, nothing unusual could be found either in the patient's constitution or previous health. Ophthalmitis of febrile, phlebitic, or pyæmic origin, is the most common form of the disease. Cases of such strictly traumatic origin as the present are comparatively rare, and, as such, present an opportunity of studying the disease under its most simple form.

It may be very fairly asked, Why was not the treatment of the first stages of this case of a more active description; and more especially why was not mercury administered? Had the case from the first been treated in hospital, where its daily progress might have been watched, and its treatment modified accordingly, a more energetic course would have been adopted; but, under the circumstances of the case, this was impossible. Moreover, the symptoms of ophthalmitis appeared to have only really commenced on the 19th, and to have already reached their climax by the 21st, when the globe was so disorganised as to call for its removal.

Original Communications.

NOTE ON A SEQUELA OF INFANTILE PURULENT OPHTHALMIA; AND A CAUSE OF EPIPHORA NOT PREVIOUSLY NOTICED.

By J. Vose Solomon, F.R.C.S., Surgeon to the
Birmingham and Midland Counties
Eye Institution.

Surgeons who have seen much of the ophthalmia of new-born infants in private practice, must have been sometimes perplexed at the report of the mother or nurse of the continuance or reappearance of the purulent secretion after the conjunctiva of the lids had recovered completely, or to a great extent, its tone. This occurrence has not been noticed by systematic writers; nor has the cause to which it is referrible been remarked upon by recent contributors to the pathology of epiphora.

I have made out that the source of the purulent secretion is the tear-sac, and not the eyelids or canaliculi, the disease having travelled thither by continuity of surface. The local astringents employed against the lid-affection had proved equal to the removal of the ophthalmia from the parts which were freely exposed to their action; but had failed, owing to the obstacle offered by the anatomical arrangement of the excreting tear-apparatus, to correct the disease of the mucous lining of the sac.

During the past year—1860—six cases have come under my care which were illustrative of this practical point. They show also that epiphora of apparently congenital origin is due to other causes than insufficient development of the osseous parietes of the tear-canal, or hereditary predisposition.

The subjects of the disease were healthy, but diathetically strumous. In one, an infant of eight months, in whom there were grounds for suspecting a syphilitic taint, acute abscess of the sac threatened; it was swollen, tense, and red. The canaliculus was slit while the child was under chloroform, and a probe was passed into the nasal duct, with the effect of removing the urgent symptoms in thirty-six hours. The five other cases were treated in the same way, with the addition of astringents. The attendants should be directed to press out the sac-contents every two or three hours.

The duty of examining the condition of the tear-sac in all cases of infantile or adult purulent ophthalmia will not need, after what has been said, to be urged upon surgeons.

ON SORE-THROAT.

By THOMAS INMAN, M.D.Lond., Physician to the Liverpool Royal Infirmary.

THE subject of sore-throat is so familiar, that few think it now-a-days worth much consideration. Yet that it is so, the following observation will prove.

If we ask ourselves what we mean by the words sore-throat, the natural response is, "a throat which is sore"—but not content with this, we add, that the throat is sore because it is affected by inflammation or by ulceration; and we still farther localise our ideas, by saying that the affection is one of the tonsils or mucous membrane; so that the ultimate answer to the question is—"the throat is sore, because the mucous membrane is inflamed or ulcerated;" and as a result, all our remedial measures are directed to curing this abnormal condition, by astringent or stimulating gargles, the use of caustic, and the like.

But if we prosecute our investigation a little farther, we shall find that we have been contented with superficial information. "Why," we ask, "is inflammation and ulceration of the mucous membrane attended with soreness?" and "why do we have soreness, as in some forms of dysphagia, when such mucous affections are absent?" Again, we sometimes see the throat inflamed but not sore; and we most of us know practically, that when ulceration exists extensively, little pain is complained of except during the act of swallowing; this leads us to the idea, that the "soreness" is chiefly connected with, and dependent upon *deglutition.*

The only exception to this is in that condition of the throat to which the name of relaxation is given, in which we find that the act of swallowing positively gives relief. This I shall explain by and bye.

Having arrived thus far we have to inquire "why is deglutition so painful in cynanche?" The answer is readily given. The act is a muscular one, involving the associate contraction of the faucial and pharyngeal muscles, which are generally implicated by an extension of inflammation from the mucous membranes. But is it a fact, that muscles in contact with inflamed surfaces are commonly and painfully affected? Unquestionably; for we all know how severe is the affection of the intercostals in herpes zoster or in pleurisy, and of the abdominal muscles in cases of peritonitis. We know how acutely painful is muscular contraction near a goutily inflamed joint, or in acute rheumatism.

The idea being once started, that the pain in cynanche is *myalgic,* we next inquire whether it may not be produced by causes external to the pharynx; we turn to experience, and find that sore throat attends inflammation of the parotid. I have now repeatedly seen it attend myositis of the sterno-mastoid, in which case the spread of inflammation from this muscle to the pharynx, and ultimately to the mucous membrane of the throat, has been well marked.

We have dysphagia accompanying myalgia of the sterno-mastoid, sterno-thyroid, and sterno-hyoid muscles. We have sore throat from prolonged shouting, or speaking in a high key; and I have known a similar phenomenon from severe paroxysmal cough.

The pain of relaxed sore-throat is readily explained on the muscular hypothesis—for it clearly resembles that which is felt when the cremaster, being flabby and soft, is stretched to its utmost extent by the weight of the testicle. It arises from the constant drag on the levator and tensor palati, and is also temporarily relieved by pressing the soft palate firmly upwards with the finger or any hard substance. The contraction of these muscles, which occurs during deglutition, also renders their fibres more tense for a short period, and thus gives relief from the tiresome dragging pain.

The hypothesis I thus advance is not barren of practical results. If it be true that the chief sufferings in cynanche are due to the forced contraction of inflamed or irritated muscles, it follows that any irritating applications are likely to increase the pain. Do they act thus in reality? Certainly—we have seen a child with diphtheria, unable to swallow wine in any form, and even a weak solution of tincture of iron, without spasmodically rejecting a quantity through the nostrils, and almost screaming with pain, which was, from the fingers being driven into the ears in that direction, evidently referred to the attachment of the lingual, faucial, and pharyngeal muscles to the styloid process. Yet, this patient could readily swallow milk and other bland fluids without any suffering or muscular spasm. The application of nitrate of silver never gave her relief—she said it made her worse. Another patient, an adult lady, with scarlatina ulceration of the throat, presented a similar phenomenon. She was equally unable to take wine without agonising pain—yet she could swallow barley water with ease and comfort, and all local applications of caustic solutions made her worse. The theory farther points to a new principal of local treatment, viz.—*we must try to relieve the irritability of the muscles, as well as to heal the* mucous membrane. Acting on this idea, I have used opiate epithems externally for some time, and a few weeks ago began to use laudanum and water as a gargle. The effects have surpassed my expectations, and no case could more fully corroborate my views, than the following. Mr. C. aged 30, after being much exposed to scarlatina, had ulcerated sore throat: this was so exquisitely painful, that he was unwilling to swallow anything; and he could not sleep, for he was constantly awaked by involuntary efforts of deglutition, which occurred as soon as he began to be oblivious; and he could not even speak intelligibly. I used no internal application whatever but a gargle of laudanum and water. He reported the effect as magical, for he was able both to speak and swallow comfortably as soon as he had finished gargling; the ulceration remained, the *soreness* had gone. He had only to repeat the application three times in all. The only adjunct I adopted was the use of iodine paint externally.

The effect of anodyne gargles is not merely to diminish the irritability of the muscles and the constant desire to swallow, which is so provoking an accompaniment of cynanche; they have also a sedative influence on the mucous membrane, and diminish the amount of its secretion, the abundance of which is so distressing in many cases; and in one remarkable case which came under my care, many years ago, in which there was general stomatitis as well as inflammation of the fauces and pharynx, total inability to swallow anything or to articulate, with a perpetual discharge of very dense mucus, the use of laudanum and water as a wash was the first and only thing which gave relief.

We may sum up our views shortly thus. The pain of sore-throat and dysphagia is due to the muscles of deglutition being unusually irritable or inflamed, and in the treatment of these affections regard must be had to these muscles, as well as to the condition of the mucous membrane covering them. The new plan of treatment does not materially militate against the old, and the two may always be combined in one way or another.

I may add in conclusion, that the anodyne treatment is applicable to all forms of cynanche—whether it is catarrhal, scarlatinal, diphtheritic, syphilitic or croupy; and that I have not yet found the laudanum act prejudicially in any case.

While on the subject let me add, that before I adopted this plan I was in the habit of prescribing a small piece of camphor to be constantly retained in the mouth in cases of cynanche, tonsillitis, and for sore-throats generally. In the former I know nothing equal to it—in the latter it is inferior to opium.

Transactions of Branches.

EAST YORK AND NORTH LINCOLN BRANCH.

ON DIPHTHERIA AND ITS ASSOCIATED DISEASES, AS THEY APPEARED AT BARTON-UPON-HUMBER AND THE NEIGHBOURHOOD IN THE YEARS 1858 AND 1859.

By W. H. Eddie, Esq., President of the Branch.

[Read September 26th, 1860.]

The epidemic of diphtheria which visited Barton and the neighbourhood during 1858 and 1859, exhibited many important facts which cannot fail to be interesting to the members of the Association, not only as regards the disease, pure and simple, but also its associated diseases and sequelæ.

The town is chiefly built on a substratum of shingly gravel and sand, under the edge of the chalk formation, in which there is here a break for the passage of the estuary of the Humber. From this latter, the town is distant about a mile, with a gentle declivity, affording an excellent opportunity for drainage. This has been taken advantage of to some extent, the principal part of the streets having been tunnelled; there is, however, much yet to be done before the town can be considered complete in a sanitary point of view. From the situation of the town, so near a large tidal river, the air is generally pure, but cold in the spring, from its exposure to the east, from which quarter the wind usually blows at that time of year.

Scarlatina, which had not been epidemic amongst us for many years, had been prevalent in the neighbouring villages to the west of Barton during the spring and summer of 1858, but was of a mild character in numbers of cases, not requiring any medical treatment; and it was in June of that year that I saw the first cases of a malignant character, at the village of Saxby, five miles from Barton. There were three children in a family of four, of the respective ages of 5, 3, and 2 years, and a younger one, 14 months old. The eldest was the first attacked, and died in four days of malignant scarlatina. The third child, a boy, aged 2 years, fell ill the day before the first died; he was carried off by effusion on the brain before the eruption had fully come out, or any serious affection of the throat made its appearance. The second now began to be ill, but had the scarlatina much less severely than the other two; the throat-affection being but slight; and, although she had anasarca, with albuminuria, she ultimately recovered. The youngest child was the last attacked; and in him the scarlatina was followed by diphtheria. As the former disease declined, the latter showed itself more clearly; the throat-affection increased; the parotid and sub-maxillary glands became much swollen; and, the disease extending finally to the larynx, the child died asphyxiated.

In September 1858, the disease appeared in Barton; and so intimately was it connected with scarlatina, that it seemed almost impossible to separate them. I was, indeed, led to believe that they were identical, and only two forms of the same disease, modified by circumstances. It was only after having carefully observed the numerous cases that came under my notice, that I became convinced that they were two distinct diseases; for, although in the commencement of the epidemic they seemed so intimately associated as to baffle all attempts to separate them, after a few weeks diphtheria began unequivocally to show itself as a distinct disease, appearing in some who had had scarlatina, and were apparently perfectly recovered; and in others who were grown up, and remembered having had scarlatina in childhood.

It is not in my power to give any proximate idea of the number of cases; the only thing possible is to give the number of deaths; and with this, I have been furnished by my friend Mr. Morley, the district registrar; and it includes all the deaths registered of scarlatina, diphtheria, ulcerated throat, etc. Nor do I know of any better plan; as though in most cases diphtheria succeeded scarlatina, there is no doubt that many of the cases registered of malignant scarlatina were affected with diphtheria at the same time, and, had they lived a few days longer, would probably have shown the latter disease in its characteristic form.

The number of deaths furnished by the registrar are as follows:—

1858.	Barton.	Neighbourhood.	Total.
September	1	0	1
October	5	1	6
November	8	0	8
December	25	1	26
1859.			
January	11	4	15
February	2	3	5
March	5	7	12
April	3	4	7
May	1	5	6
June	3	3	6
July	3	5	8
August	1	0	1
September	—	1	1
October	0	0	0
November	2	4	6
December	1	1	2
1860.			
January	—	2	2
February	1	—	1
July	0	1	1
	72	42	114

Of the above 114, the ages were as under; viz.:

Under 1 year			8
1	year and under	2	12
2	,,	3	15
3	,,	4	19
4	,,	5	13
5	,,	6	7
6	,,	7	7
7	,,	8	5
8	,,	9	6
9	,,	10	3
10	,,	11	4
11	,,	12	4

12	,,	13	..	1
13	,,	14	..	0
14	,,	15	..	3
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From these tables, it will be seen that it was from the end of September 1858 to March 1859, that the greatest number of deaths occurred in Barton; and that after that there were more in the neighbourhood, principally in Barrow, Goxhill, and East Halton. It was during the months of November, December, and January, that scarlatina was most prevalent, after which all the deaths are registered "diphtheria" simply; and many of the fatal cases that occurred in the spring of 1859 were patients who had had scarlatina the winter before. And from this time, although there were many cases of diphtheria and some deaths, the disease was more tractable, attacking for the most part older persons, where the proper remedies could be used better than in young children, to whom medicines could be administered only with the greatest difficulty. After the apparent total subsidence of the disease in an epidemic form, there still occurred occasional cases; and at the time I write this there are two or three instances of the disease in Barton.

The character and appearances of the different cases that came under my notice were so various, as to furnish examples of almost every form of the disease mentioned by authors, from the simplest to the most complicated. For instance, I was occasionally called to a patient complaining of difficulty and pain in swallowing, attended with more or less fever. On examining the throat, it presented a certain degree of inflammatory blush, with a white patch of the characteristic effusion on one or both sides near the pillars of the fauces or the velum. The solid nitrate of silver was applied, not only to the patch of effusion, but also slightly to the whole inflamed membrane; a mixture of chlorate of potash was given; and the patient would be quite well again in two or three days, sometimes not requiring a second application of the nitrate, but merely the use of an astringent gargle for a few days.

Cases of this description were not unfrequent, and are the simplest form, the disease occurring occasionally in one member of a family where, perhaps, some have had it in the most malignant form. Sometimes, instead of being confined to the throat, the effusion would extend to the palate, the tongue and the gums, spreading over them like a thin gauze veil, which would peel off on the second or third day; and, although it would leave no ulcer behind, the surface of the tongue and mouth was left so raw and tender that the patient could hardly bear even liquids in the mouth.

Another form I may describe as simple, although more dangerous than the preceding, the *laryngeal or croupy*. Of this I saw some instances.

The first was in an infant a few months old; it had been ill one day of what the parents thought was croup; indeed, it had the ringing cough, dyspnœa, etc., but there was a stiffness about the throat which induced me to examine it. On depressing the tongue, I could see at the base of this organ, and in the neighbourhood of the epiglottis, a loose edge of diphtheritic membrane, which was evidently being detached. An emetic was administered, which removed a considerable quantity of false membrane; after which small doses of chlorate of potash were given for a few days, and the child recovered. Another interesting case of this form of the disease I saw in the practice of my friend, Mr. Morley; it was much more severe than the preceding case, terminating fatally in thirty-six hours. We had an opportunity of a *post mortem* examination of the larynx and windpipe, which makes the case much more complete.

On opening the larynx, it was found coated with false membrane; and this extended down the trachea, and even into the smaller bronchi, which it seemed completely to clog. Some of this false membrane was stripped off; the mucous membrane was rough and vascular underneath: the membrane when detached was thick and tough, like buckskin.

There was another class of cases, in which the vital powers seemed completely prostrated under the morbific poison, and the patients died in a state of collapse in a few hours, before any of the local affections had made their appearance; thus proving, in contradiction to Bretonneau, that diphtheria is a constitutional disease, and may, under some circumstances, prove fatal before the throat-affection has assumed any degree of severity.

I was called on the 9th of December, 1858, to a child, three years old. The mother informed me that the child had complained, on getting up in the morning, of feeling unwell, having headache and sickness, with some shivering. Supposing it was from cold or disordered stomach, she had given it a rhubarb powder, which had moved the bowels; but, as the child continued to get worse towards the afternoon, I was sent for, and saw it about 4 P.M. At this time it was in a state of collapse, with coldness of the extremities, feeble pulse, etc. As there was some huskiness of the voice, I examined the throat and found some degree of redness; but exudation of false membrane had not taken place. I applied nitrate of silver to the affected parts of the throat, and ordered wine and other restoratives; but the patient never rallied, and died in little more than an hour after my visit.

I will now relate a case, which was the longest that came under my observation, being under treatment for three weeks; and which, although my hopes were raised at times of bringing it to a successful termination, ended fatally at last.

I was sent for on December 31st, 1858, to visit Mary Ann B—, a delicate-looking child, 3 years old. I found her labouring under scarlatina; the face, neck, and bosom were covered with rash, and the throat was red, and both tonsils swollen and inflamed, with a few ash-coloured spots. I ordered half a grain of quinine every four hours, and the hydrochloric acid gargle to be injected into the throat occasionally. The scarlatina subsided in a few days, and the throat seemed much better; but in a day or two a patch of false membrane appeared on the pillars of the fauces of the left side, and the cervical glands of the same side began to swell. The throat was painted with a strong solution of nitrate of silver; the gargle was ordered to be continued. As the throat was not so well the next day, the solid nitrate of silver was applied, and the following mixture ordered:—

℞ Potassæ chloratis ʒss; decocti cinchonæ ℥iij; tinct. card. comp. ʒj. M. A tablespoonful to be taken every four hours.

In a day or two the false membrane sloughed off, showing a deep ulcer which healed, leaving, however, a permanent excavation. The opposite side was next attacked, and was treated in a similar manner, with the same result. After this the upper and back part of the pharynx became affected, and from this the disease spread behind the velum palati, through which it ulcerated, leaving a circular hole a quarter of an inch in diameter, with a perfectly defined edge, as if the piece had been taken out with a punch. The child began now to get rapidly worse; a fœtid discharge ran from the nose, mixed occasionally with blood; she also became deaf, and there was discharge from the ear of the same character as from the nose, showing extension up the Eustachian tube. The patient had so far taken plentifully of all kinds of support; but the act of swallowing became now very difficult, as almost all the fluids regurgitated, and were forced up the nose. I now gave tincture of sesquichloride of iron, and had chlorate of lime lotion injected up the nostrils. All the means were, however, of no avail; for the little patient was attacked on January 18th with severe hæmorrhage, of apparently arterial character, from the nose and mouth, and expired in a few minutes, just three weeks from the first seizure.

In many cases, and those which almost invariably proved fatal, at least in children, there was great enlargement of the parotid and submaxillary glands to such an extent as to prevent the person from opening the mouth beyond a small chink. It was painful to witness the sufferings of the patients in this state, lying on the back, breathing with difficulty, and scarcely able to swallow the smallest quantity of liquid, the breath exhaling the most fœtid odour from the sloughs in the throat, which could not be removed. Death seemed a relief to sufferings which it was not in our power to alleviate.

Another form of the disease, and not the least interesting, is the *cutaneous* form. Trousseau, who has written on an epidemic of the cutaneous form which occurred in France, asserts that "the diphtheritic affections of the skin are of a nature identical with those which have their seat in the larynx and fauces." Although this was not a common affection with us, there were not wanting cases. In one I noticed several large bullæ; but more commonly the eruption had the character of ecthyma; and it was one of this description which Dr. Burdon Sanderson saw when he was at Barton on his tour of investigation. The eruption was situated in different parts of the body; the folds of the thighs and axillæ were the usual seats, proving that it was not produced by the excoriation of the discharge from the nostrils, as has been asserted by some authors, who contend that the disease is a local affection.

With regard to the associated diseases, I have already said in the beginning of this paper, how intimately scarlatina and diphtheria seemed connected, especially in the beginning of the epidemic; so much so that I was of opinion that the two were only modifications of the same disease. It was not uncommon to see in a family some attacked with one disease and some with the other at the same time, and apparently from the same infection. I had a remarkable instance of this in one family in the neighbourhood of Barton. It consisted of father, mother, and five children. Of these, the second, 8 years old, had malignant scarlatina, and died on the third day; the third had it mildly; the fourth severely and got better; the youngest, 2 years old, had diphtheria following scarlatina, and died on the eighth day. The eldest child, a girl of 12 years old, escaped without taking either disease. Lastly, the mother, who had had scarlatina in childhood, had an ordinary attack of diphtheria, from which she recovered after a rather tedious convalescence.

I also noticed another combination, namely, diphtheria and purpura. Of this I had one striking case in a boy 8 years old. I had attended him from the end of Nov. 1858, to the middle of January 1859, for purpura, from which he had scarcely regained his strength, when he was attacked with diphtheria, which he had in a severe form, and at the same time all the symptoms of his previous disease returned. His skin became covered with petechiæ, and his stools and urine bloody. With the aid of the mineral acids and bark, gallic acid, etc., with wine and generous food, I began to have hopes that I should drag my patient through; but on the separation of a large slough from one of the tonsils, hæmorrhage came on, from which he sank on the ninth day.

The attention of the profession has been drawn to paralysis as a sequela of diphtheria. I had an opportunity of noticing some instances of this affection; and they exactly bear out the description of Dr. J. R. Reynolds, copied into our Journal of Aug. 18th last from the *New York Journal of Medicine*. The cases which I saw were principally amongst children; and the paralysis seemed confined to the pharynx and palate. The disease generally makes its appearance about two or three weeks after all symptoms of the primary disease have ceased; the child, instead of getting stronger, appears weaker, looks paler than natural, and is unsteady in its gait; there is occasionally difficulty in swallowing, particularly liquids, which are apt to regurgitate; the voice is peculiarly nasal, like that of a person with a fissure in the palate, so that one is led to suppose that some disorganisation has taken place. On examining the throat, however, there is nothing morbid to notice; but the soft palate and the fauces hang flabby and loose, and paler than usual.

The cases recovered perfectly in a few weeks, under a tonic treatment of iodide of iron, or quinine and steel, and left no trace of paralysis behind.

A more marked case of paralysis came under my observation in a grown up man. He had a bad throat a short time before he came under my care, and, when I saw him, had a large slough on one of the tonsils. He was some time under my care before the throat-disease was removed; and when that was accomplished, he began to complain of pain in his head, want of feeling and power in his legs, and became in a short time paraplegic. This lasted for some weeks; but he ultimately perfectly recovered.

The pathology of diphtheria has occupied the attention of practitioners both abroad and in this country; and you will no doubt be familiar with what has been written on the subject, particularly with an article in the number of the *British and Foreign Medico-Chirurgical Review* for January 1860, by Dr. Burdon Sanderson, who has had very great opportunities of investigating the disease in several parts of England where it has been epidemic.

My own observations have led me to form the same opinion as most authors, that it is essentially a disease of the blood, which from some cause, whether from loss of vital power or chemical change, has a tendency to part with its solid contents. This is seen in the exudation of false membrane in the throat and larynx, which has given the name to the disease; as also in albumen in the urine. There have even been instances in this neighbourhood of the peculiar exudation on the blistered surface, where blisters had been incautiously used for the sore-throat; and it is a possible explanation of the paralysis which occasionally follows, that there is a fibrinous deposition in the brain or at the root of the nerves. This also explains why the patient occasionally dies of hæmorrhage after the separation of a slough more than ordinarily large, inasmuch as it shows a dyscrasia of the blood, produced by the deposition of its coagulable portion.

Dr. Sanderson, in the article above alluded to, maintains that the local affection of the mouth and throat is of an inflammatory nature, and that the different modifications of the disease are produced by the inflammation being superficial in the epithelial covering of the mucous membrane, in the membrana propria, or the submucous tissue. It is not improbable that is the right explanation. The first is seen in the albumen and fibrinous exudation which occasionally lines the mouth and larynx; the second, where there is sloughing of the membrana propria; and the last, that affection which is characterised by the name of putrid sore-throat, where the sloughing is deep and extensive, and the parotid and submaxillary glands greatly swollen.

It follows that, as this is a blood-disease, and characterised by great general debility, the system must be supported by stimulants and tonics, particularly what are called blood-tonics; and these are the remedies which have been found most effectual. Unfortunately, in young children labouring under diphtheria, it is not so much a question of what to give, as how to make them take it. The remedies which I have found most effectual are quinine and chlorate of potash, given in the following form:—

℞ Potassæ chloratis ʒj; acidi hydrochlorici ʒj;
tinct. cardam. co. ʒij; decoct. cinchonæ ℥vj. M.

Two tablespoonfuls every four hours form the dose for an adult, and a less dose for younger patients, according to age. This formula I have used extensively, and have found it more efficacious than any other; the chlorate of potash seeming to have a specific influence on the mucous membrane of the mouth and pharynx, whilst the mineral acid and bark have a tonic and antiseptic influence on the system. Where, as in the latter stage of the complaint, there is a tendency to hæmorrhage on the separation of sloughs, or an eruption of petechiæ, I have given the tincture of sesquichloride of iron, sulphate of iron with quinine, or gallic acid with cinchona; all of which I have found useful, particularly the last. In some cases, in patients of a full habit, where there is sometimes a good deal of fever, I have given the chlorate of potash with spiritus ætheris nitrici, with benefit; and in some rare cases, where there was swelling of the parotid glands in the commencement, I ventured to apply leeches, which have afforded great relief, notwithstanding the general inadmissibility of blood-letting.

As to the topical applications to the throat, the nitrate of silver is the most effectual, either in solution or in substance. In my own practice, I have preferred the latter, applied once every day or every other day; and the constant use of the hydrochloric acid gargle (ʒj to ℥vj), with or without tincture of capsicum; in young children, to be used with a syringe.

It will occasionally be found that the false membrane attached to the fauces and pharynx is so tough and hard that solid nitrate of silver will not detach it. I have found the hydrochloric acid, diluted with an equal quantity of water, applied to the part with a camel-hair pencil, expedite the separation of the slough; and then the nitrate of silver, applied to the ulcer, soon causes it to heal.

I have always found those cases the most intractable in which there was great swelling of the glands, and generally give an unfavourable prognosis in such cases; for the throat is so swollen, and the action of the jaw so limited, as to prevent the swallowing of food or medicine in sufficient quantities to sustain the failing powers of the constitution, as well as any applications to the throat. In these cases, leeches are inadmissible, and blisters do but aggravate the complaint; the cold evaporating lotion is the only remedy I found of any use. The usual causes of death are, hæmorrhage; asphyxia, when the disease extends to the larynx; and asthenia.

The same rule holds good with regard to this epidemic as to all others; viz., that it was most fatal in those localities where the drainage was bad and the ventilation imperfect, and where the population was the densest and worst fed.

Reviews and Notices.

Foundation for a New Theory and Practice of Medicine. By Thomas Inman, M.D., M.R.C.P. Lond., Physician to the Liverpool Royal Infirmary, etc. Pp. 528. London: Churchill. 1861.

Dr. Inman is a bold man. He has, as we venture to think very unwisely (in this, the second edition of the work above-named), thrown his gauntlet in the teeth of all his critics. Having done so, he must not be surprised if they accept his mode of doing battle, and fight it out with him after his own fashion. We will, at once, then, candidly tell Dr. Inman that we think he is not only unwise, but very much mistaken in the views he maintains. *A priori*, it is much against him, that he has no one (apparently) amongst those who are generally accepted as judges (in some sort) of medical writings to back him. When all the medical world, as represented by the medical press, stands on one side, and Dr. Inman remains isolated on the other, he is decidedly in a manifest minority, and, we think the world will say, decidedly wrong.

But the strangest part of the thing is this: that although all the world is thus against Dr. Inman's mode of viewing things, they are probably all very much of the same opinion in respect to the uses and applications of medicines as he is! This new theory of medicine, as far as we can find any novelty in it, is just the theory, or rather practice, of every sensible practitioner of the present age. Surely there is nothing new in the idea that homœoquackery taught the polypharmacists a useful lesson. But, because the Irish famine was the means of bringing blessings on Ireland, there is no need for us to bedaub the gaunt creature as a most admirable contrivance. That must, indeed, be a most wretched thing which has not some soul of good in it. Mesmerism has been the means of opening our eyes to a certain number of psychological phenomena, which had been previously ignored; but surely Dr. Inman won't blame us for despising and abusing the lies and trickeries, clairvoyance and pocket-picking, which are practised under that title. Are we to maudle over a set of rascally cancer-curers, because they have assisted in showing us the uses of caustics as a means of removal of the cancer-mass? What does Dr. Inman desire us to do with these globulistic *protégés* of his? He says we abuse them. Does he want us to praise them? Does he wish us to run about all over town, and declare that homœoquackery is the great benefactor of medicine—that, although an error in itself, it is the greatest of modern blessings—because it has been the means of opening the eyes of medicine to that fearful and slaughtering indulgence in black draughts, blue pill, and colocquintida, which medical men have heretofore indulged in? Does he wish us to enter some temple of science, and calmly argue out the matter with these irregular Bashi-bazouks of science? Surely he cannot dream of such an absurd thing—he never would ask men of business to occupy their time in reasoning upon mere matters of credulity wherein no reason can enter.

We will tell Dr. Inman how we think every reasonable member of our profession should treat the homœopath. He should have nothing to do with him in matters of medicine. As an honest man, he cannot entertain homœopathic views of medical treatment; and to meet the globulistic man in consultation is to patronise (in our opinion) a deceit in the face of the world. He should never interfere with the irregular individual; only keep clear of him. Dr. Inman should remember that it is not *we* who attack homœopathy; it is homœopathy that is for ever coming across the path of medicine, like the little boys that are tumbling about in the streets before us, trying to attract our attention, and get a notice from us. In our opinion the thing only survives by its constantly hanging itself on to the skirts of medicine; and we, who hold out a hand—give a copper, so to say—to those who thus tumble throw mud about, and play tricks before us, encourage the delusion.

And we think everyone very wrong, too, who speaks of allopaths and allopathy. What does Dr. Inman mean by the term? It is decidedly a degrading one, and a ridiculous one to apply to a medical man, and the art of medicine. Surely medicine need not go to the homœopaths for a title. It may suit their purposes, and does answer well with the public, to use such phraseology; but Dr. Inman, and all medical men, should avoid it, if only for its sheer absurdity and unmeaningness.

- Dr. Inman is also quite wrong in thinking that because a man patronises new views about treatment, therefore people jump up and attempt, as he says, to crucify him. His great mistake here is in assuming that this knowledge of better things is confined to a select and persecuted few. He should give the medical world some little credit for going ahead with the times. As we have already told him, we believe much of his views of the moderate use of medicines are the views of nine-tenths of the practitioners of the age. It may be Dr. Inman's opinion that all this great lesson was taught us by the sublime foppery of homœopathy; but we don't think so. There are to be found in the history of medicine—on every page of it—the recorded opinions of great men, who have ever held just the same views about the vast abuses which have been made of drugs, etc., as we hold now.

Dr. Inman, indeed, in the preface to this his second edition, has occupied himself, first, in combating a shadow, and, secondly, in attempting to elevate the homœopath at the expense of his medical colleagues. We can hardly think he was awake when he wrote these words:—

> "As his experience progressed, and his knowledge of homœopathic practice and its results extended, he felt obliged to confess that a majority of those who adopted the new views were conscientious men, and were, in mental calibre, superior to the majority of their opponents."

Now, if this really be Dr. Inman's opinion, how comes it that he still consorts with the men of smaller minds. If he were logical he would follow out his premises; he would admit that his own practice being that of the weaker-minded sort of doctors, is more probably erroneous than that of the men of larger calibre of minds. Here we will just put one or two facts concerning this extra calibre of the homœopathic mind to the honest sense of Dr. Inman. Is there a homœopath known in the world of science beyond the street in which he lives? There is something very curious in this fact. Men of our profession indulge at times in a variety of scientific pursuits, more or less foreign to medicine. Some take to chemistry, some to mathematics, some to botany, some have geological tendencies, and some are deep electricians; in fact, in every science our profession has its honourable representative. But where is the homœopathic man of science—the extra-calibre-of-mind man? We are open to correction, but we speak truly when we say we know not the homœopath who has ever done a single scientific act which has given him a name, to carry him out of the little petty circle of *gobemouches* within which he circulates, and who swallow his globules and believe his nonsense.

Here as ever, quackery is the Dead Sea of science. Nothing can live in it, or any good come out of it. It destroys all that comes within its blighting influence. Are we not then justified in saying rather, that those who embrace this delusion have souls of a calibre incapable of embracing the great views of science.

But we are sure Dr. Inman often says more than he means; that he is reckless when he writes, having too free a pen and too ready a wit. We are therefore satisfied that he does not always mean to say what he does say, however unfortunate the practice of doing so may be. For instance, does he really dare to stand up in the face of the Masters of Medicine and say, as he has done in this Preface: "In the course of the author's inquiries, he ascertained that there was a form of myalgia universally mistaken for peritonitis"? Doctors bled and calomelised for it; and homœopaths gave globules for it. It was cured better under the homœopaths by *simple rest* given with the globules (not by the globules). Consequently, homœopathy is better than medicine, argued the men of large calibre minds, who were by this simple fact converted to homœopathy. Such is a specimen of the assumptions of Dr. Inman—the exceeding presumption, we may say, in this case, where he supposes that no physician before himself knew how to distinguish muscular abdominal pain from peritonitis—and such is his method of drawing conclusions.

We have said no word of the book itself, because we take it to be *verbatim* the same work as the first edition, which appeared only a short time ago. The only novelty which we remember to have noticed in the work at that time, was the unnatural and curious attempt, exhibited in its pages, of extracting all the possible sweets from homœopathy (which Dr. Inman disbelieves in), and saying the civilest things of its professors; and at the same time of mingling with this curious extract a most unsavoury and ill assorted preparation of the ideas, opinions, and practice of the Medical Art, which he believes in, and of whose professors he says so many uncivil things. We do most sincerely wish we could say kinder things of a man who is evidently a most industrious labourer in the field of medicine; and whose contributions have often been seen in these pages. Unfortunately, he wills it otherwise; and we have no choice but to speak honestly.

Diagrams of the Nerves of the Human Body. By W. H. Flower, F.R.C.S., Assistant-Surgeon and Demonstrator of Anatomy at the Middlesex Hospital. London: 1861.

These diagrams will be found of great service both to the student and the practitioner of medicine. The author has endeavoured here to place the knowledge we possess of the nerves in a form easily accessible as well to students as to those whose avocations no longer afford time or opportunity for elaborate anatomical investigations. The distributions of the nerves are given, so as to be seen at a glance, from their commencement to their terminations; the parts to which they are distributed not being introduced. The names of the nerves are printed on them, so that they are at once recognised, without further reference.

The diagrams are all most beautifully executed; and we gladly welcome them, as a most valuable addition to the library of the anatomist, and of the dissecting room.

British Medical Journal.

SATURDAY, JANUARY 26TH, 1861.

CELLULAR PATHOLOGY: ITS PRESENT POSITION.*

RESUMING this subject from the JOURNAL of January 12th, we proceed to the examination of the connective tissue theory.

The German anatomists have for some time been in the habit of calling certain fibrous tissues, and especially ligamentous tissue, by the name of connective tissue. In the case of ligament or tendon uniting muscles to bone, there can be no objection to this. Reichert was the first to group together various tissues widely different from one another, to the whole of which he gave the name of connective tissues, because they lie between, and so far connect, or, as Kölliker more correctly puts it, support various histological elements. Reichert imagined that, however different they were in structure and chemical composition, they were united together or continuous throughout the organism, and served as a substratum or basis-tissue to all the parts of the body. Kölliker is opposed to this view, and declares it is not so much their anatomical union as the genetical connexion between them and their correspondence in function which keeps them together. But when it is considered that these connective tissues are said to be the vitreous humour; mucous tissue, such as occurs in the lower animals, and gelatinous tissues of the embryo, and which must not therefore be confounded with mucous membrane; the areolar and elastic fibrous tissues, with their various modifications in tendon, ligament, etc.; cartilage; bone; and teeth,—the idea of grouping them together either structurally or functionally, and calling them by one name, must be admitted to be most transcendental and far fetched.

Virchow has, however, extended these tissues greatly. For example, cornea and the substance uniting the nerve-cells and fibres, are according to him connective tissue; and from some expressions (see p. 268) we are led to suppose he considers the grey matter itself as analogous with it. This nervous connective tissue, he calls *neuroglia* (nerve-cement) (p. 277), and the bodies it contains, instead of being nerve cells, are connective tissue corpuscles. He says,—

> "There can, according to my firm conviction, be no doubt but that the larger cells which pervade the posterior nerves of the spinal marrow were nerve cells; but, on the other hand, it must be maintained with equal positiveness, that where *neuroglia* is met wis. it also contains a certain number of cellular elementth Immediately beneath the surface of the cerebral ventricles, we commonly meet with spindle-shaped cells lying parallel to it, just like those which are found in other kinds of connective tissue; these become larger under certain circumstances, and, in oblique sections, often display themselves in the form of stellate cells."

Having thus endeavoured to show that connective tissue in one form or another is present everywhere throughout the body, he points out that it contains round, oval, or stellate cells (connective tissue cells), which anastomose with each other, so that tendon, areolar texture, nervous tissue, etc., like bone and teeth, contain spaces and minute canals which serve the purpose of a nutritive system. There can be little doubt, however, that as Henle was the first to point out, Virchow has here made an extraordinary histological error, and confounded the spaces which lie between bundles of fibrous tissue with stellate cells. So in the cornea, he confounds the spaces running between its laminæ with branching cells. In many cases, also, what he calls fine canals are no canals at all, but solid filaments resulting from the transformation of the cell walls, as Schwann correctly pointed out. Again, in other cases, he confounds the nuclei which remain permanently in fibrous tissues, and are visible on the addition of acetic acid, with cells, in the same way that he declares the lacunæ in bone to be cells, though they are manifestly only the nuclei of cells. This constant confusion between cells and nuclei has been well pointed out by Beneke, who showed that instead of a cellular pathology, Virchow ought to have spoken of a nuclear pathology. Thus the connective tissue theory, as he produces it, is made up of nothing but errors and contradictions.

But not only, according to Virchow, do the connective tissues serve the purpose, physiologically, of an accessory circulation by means of nutritive channels; he endows them with the power of producing all kinds of morbid growths, simple and malignant. Lest we should fail to state correctly his views on this subject, we quote his own words:—

> "We may, with trifling restrictions, *substitute for the plastic lymph, the blastema of the earlier, the exudations of the later writers, connective tissue with its equivalents, as the common stock of germs* (keimstock) *of the body*, and directly trace to it, as the general source, the development of new formations." (P. 398.)

The trifling restrictions referred to, we presume, relate to the fact that pus on the surface of mucous membranes is exceedingly common, and that under circumstances where the connective tissues have not only never been shown, but cannot even be suspected to originate it. To overcome this difficulty, it is maintained that epithelial cells also have the power of originating morbid growths, and that pus may be formed in epithelial as well as in connective tissue corpuscles (p. 445). The mode in which this is brought about is by division and multiplication of the nucleus within these various cells; only that sometimes this *proliferation* of cells, as it is called, terminates in hypertrophy of normal textures, as bone and fibrous tissue; at other times, in pus, cancer, or even tubercle—as represented (Figs. 124, 137, 138, and 144).

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* Cellular Pathology, as based upon Physiological and Pathological Histology. By Rudolph Virchow, Professor of Pathological Anatomy, etc., in the University of Berlin. Translated by Frank Chance, B.A., M.B.Cantab., etc. 8vo. London: 1860.

Now, it had been long shown by Lebert that in fibrous tumours certain cells contained numerous nuclei, forming many nucleated cells, as they have been termed. Goodsir and Redfern have shown the cartilage cells when irritated to undergo the same endogenous growth, and the latter produced it artificially. Hughes Bennett described and figured a similar change in epithelial and in gland cells, and Paget in myeloid tumours. There can be no doubt, therefore, that under certain circumstances, fibre, epithelial, gland, cartilage, and cancer cells, have the property of multiplying endogenously. But, hitherto, it has been supposed that the included cells so formed were simply young cells of the parent tissue. It was reserved for Virchow to maintain that pus-cells—that is, new morbid cells—originate either in epithelial or fibre-cells, and that both cancer and tubercle also grow within the latter. On looking at the figures which he gives as illustrative of this discovery, and which we have previously enumerated, it will be confessed that they are very unsatisfactory. One of them (Fig. 144) is a mere diagram, and does not profess to have been copied from nature; and the others, though nominally representations of actual demonstrations, we fear also partake of the diagrammatic character. We have in vain endeavoured to see pus-corpuscles within epithelial or connective tissue cells. Nowhere have we seen any evidence that tubercle forms within fibre-cells, and still less cancer. These three morbid products are exceedingly common, and if Virchow's statements be correct, no difficulty ought to exist in demonstrating these things, and yet, though carefully and perseveringly sought for, we are not aware of any histologist in this country having yet been fortunate enough to see them.

We, cannot, therefore, but conclude that there is some fundamental error in observation; and if the mistake pointed out by Henle—certainly one of the first living histologists—be remembered, we can have no difficulty in conjecturing how this has originated. In making sections of fibrous tissues infiltrated with pus, cancer or tubercle, what more natural than that the corpuscles should accummulate in the spaces between the fibrous bundles? These, being regarded by Virchow as connective tissue cells, are considered not only as being filled with, but as having produced these morbid cells. Thus, one error has generated the other. As to pus forming within epithelial cells, he himself gives no figure in support of that notion. We may ask, therefore, if he himself has ever seen anything of the kind?

Having now endeavoured to show that the theory of cellular pathology, as developed by Professor Virchow, is neither new nor true, we consider it unnecessary to follow him among the numerous ramifications into which it leads in the course of the twenty lectures contained in the book. The fundamental idea being erroneous, it would be easy to show that all the arguments and conclusions he derives from it are equally so. Indeed, it is to us amazing that whilst revelling only among cells and imaginary proliferations, which nobody can see, he should overlook or attach no importance to the formative substances and exudations which are seen by every one, including himself. Thus, he admits there is an intercellular substance; but the use of this he does not point out. In several cases he calls it connective tissue, and attributes to it formative powers; so that, in such cases, there is no difference between him and other histologists except in words. The truth is, that this intercellular tissue of Virchow is the blastema of Schwann, and gives origin to cells in the manner correctly described by the latter distinguished observer. It is also admitted that there is such a thing as exudation; but it occupies a very trifling position in the system of cellular pathology. Thus, new bone, according to Virchow, results from a proliferation of pre-existing cells, and there is little reason even "to ask whether the callus proceeds from free exuded or extravasated matter. No doubt an extravasation takes place in the first instance into the space between the fractured ends; but the extravasated blood is generally pretty completly reabsorbed, and it contributes comparatively but very little to the real formation of the subsequent uniting media." (P. 441). At p. 428 we find a figure representing the structure of a tumour in the jaw of a goat. It exhibits trabeculæ of bone, enclosing a soft, slightly fibrous substance, which is evidently an exudation, but which he calls connective tissue, because there are visible under a higher power (Fig. 132) triangular spaces between the bundles of fibres, which, of course, according to him, are the ever-recurring connective tissue cells. A more complete misinterpretation of facts it is scarcely possible to imagine. Again, inflammation, according to him, originates in irritation, and results in proliferation of cells. He is of opinion "that, *in the sense* in which it has usually been assumed to exist, *there is no inflammatory exudation at all*, but that the exudation which we meet with is essenially composed of the material which has been generated in the inflamed part itself through the change in its condition, and of the transuded fluid derived from the vessels" (p. 393).

All this seems to us very contradictory and opposed to fact—there is not and yet there is an exudation. Nay he goes on to say that there are two forms of inflammation: "the *purely parenchymatous inflammation*, where the process runs its course in the interior of the tissue, without our being able to detect the presence of any free fluid which has escaped from the blood; and the *secretory (exudative) inflammation* (which belongs more to the superficial organs) where an increased escape of fluid takes place from the blood, and conveys the peculiar parenchymatous matters along with it to the surface of the organs" (p. 393). It thus turns out that there is after all an exudative inflammation, which we beg leave to think is the only true inflammation; whilst that so-called form of it, which Virchow names parenchymatous, is no inflammation at all, but evidently a process long known to pathologists which they regard as constituting morbid growths. In like manner it might be shown that the system of pathology built up by Virchow abounds in the greatest contradictions, and assumptions of novelties which, on being closely regarded, are only well known facts or processes with new names, or old names applied in a new sense, giving rise to the greatest confusion.

On the whole, this attempt of Professor Virchow to revolutionise pathology, and originate that great desideratum of German teachers—a new school—is a complete failure. It would be very unfair, however, not to give him the credit of perseverance in research. In the same manner that the wild chimeras of former philosophers led to much diligence in investigation, and to the occasional discovery of new and valuable facts; so, in his wild goose chase after proliferation of cells in all textures, Virchow has stumbled on a few real discoveries. Among them we are glad to enumerate the crystals of hæmatoidine, of black pigment in certain blood-corpuscles, and of cellulose and starch in the animal tissues. We have already seen that other discoveries to which he lays claim in this and preceding works have been copied from others, and only modified by him. Still Virchow has added facts and views to science which we gladly acknowledge, and which will serve to keep his name alive when his cellular pathology is forgotten. Like the enthusiastic searchers after the philosopher's stone or *elixir vitæ*, he has brought useful truths to light; while the ambitious dreams and hopes that stimulated his researches are not only illusory, but, in too many instances, contradictory, unreasonable, and even ridiculous.

We cannot conclude these remarks without thanking the translator of Professor Virchow's work for the excellent manner in which, on the whole, he has completed his task. Now and then there is a little confusion of expression, which, considering the hazy material he had to deal with, is by no means to be wondered at.

THE WEEK.

It is a pleasure to announce that the Medical Act has, for once, been victorious in a court of law. The decision just delivered in Queen's Bench in the case of the "Queen *v.* the Registrar of the Medical Council" is a very important one. The judges have decided that the Council have not only the power of refusing to admit an "improper" person into their Register, but also that they have the power to erase the name of any person, although admitted on the Register, if he is proved to have committed an offence (such as, if known, would have excluded him from the Register) before his registration. Here is the reported case:—

"Mr. Sergeant Hayes had obtained a rule calling upon the Registrar of the General Council of Medical Education and Registration of the United Kingdom to show cause why the name of Richard Organ should not be restored to the register, from which it had been erased by order of the Council. The applicant applied to be placed upon the register as 'a person practising in the United Kingdom on foreign or colonial diplomas or degrees,' he having a German diploma. The Council, however, refused to do so, but put him upon the register as 'a person acting as surgeon in the public service,' he being a surgeon of several poor-law unions in Yorkshire. Subsequently, the Council erased his name under the 29th section of the Medical Act (21st and 22nd Vic. c. 90), which enacts, that if a registered medical practitioner shall be convicted of any felony or misdemeanour, 'or shall, after inquiry, be adjudged by the General Council to have been guilty of infamous conduct in any professional respect,' his name shall be erased. The infamous conduct referred to, it was contended, took place many years ago, and over which the Council had no jurisdiction to inquire.

"Mr. M. Smith and Mr. Sleigh appeared on behalf of the Council, and contended that they had a right to erase the name. The conduct alleged against the applicant was forgery and misrepresentation, falsehood and conspiracy. The applicant applied to be examined and admitted a member of the Edinburgh College, and was ordered to attend an examination; instead of which he got a person to attend and represent him, and he afterwards applied for his diploma as having passed his examination. The learned counsel contended that the Council having put the applicant's name on the register in ignorance of these circumstances, they had authority, upon being made acquainted with it, to erase him from the list. The question was the power and jurisdiction of the Council to examine into conduct previous to admission.

"Mr. Serjeant Hayes having been heard at considerable length for the applicant, contending that the powers of the Council only referred to acts committed after registration, and not before,

"The Court discharged the rule."

Our associate, Mr. A. B. Steele, writes, Jan. 14th, 1861, to us as follows:—

"In the admirable leader with which you commence your editorial career, you designate the Journal as 'the voice of the profession', and the mission of the Association to be that of upholding the rights and position of its members.

"I accept these conclusions, and desire to put them to a practical test by inquiring whether the Association is prepared to rest content with having, as you observe, 'by its power and influence secured for the profession the attention of the legislature', or whether it contemplates adopting the steps necessary to render the fostering care of Government available for some substantial benefit?"

Mr. Steele then calls upon the Association—

> "At once to make a vigorous effort to retrieve the unenviable position in which it has placed the profession by the Medical Act, with its preamble unsupported—nay, to a great extent, nullified—by its impracticable clauses, some of which have proved to be 'Will o' the wisps', alluring zealous and energetic supporters of their rights into the dangerous quagmires of unsuccessful legislation."

Every one must necessarily regret, with Mr. Steele, that the Medical Act has been, in so many instances, unable legally to cope with abuses. But our correspondent must remember, that one immense boon has been gained by the profession; and it is this: That it now possesses a direct, a responsible, and an authoritative means of communication with the legislature of the country. We may be sure that all matters medical, in so far as they can be affected by Government, will in future be regulated by the opinions of the Medical Council. That a new Act of Parliament should fail in many of its intentions, is a fact of every day occurrence. All Acts require amendment, of course; and we suspect that in future such amendments must be pressed on Government by the Medical Council. This Council fairly represents the profession; and it has our complete confidence. We, of course, are bound to press upon the consideration of the Council all matters which we consider require the supervision of the Government; and it is (as we take it) the duty of the Council to discuss these matters. We cannot doubt that the Council will consider it part of their duty to remedy defects in the Medical Act. The presence of our excellent Treasurer in that body is assurance enough of this. The establishment of the Medical Council is, in our opinion, fruit enough to show of its good works by this Association—if it had no other deeds to boast of. It has given our profession what it never had before—a recognised position in face of the Government. Of this we may be sure: that no Mesmeric, or homœopathic, or semi-educated successful charlatan will in future be able to earwig a cabinet minister; or to introduce his wares into the public institutions of the country, under the patronage of his aristocratic dupes. We shall gladly insert any practical proposals, which our correspondent may send us, for the consideration of the Medical Council. No great boon, like the Medical Act, ever bore all its fruit in the first summer of its growth.

WE have received a very clever letter from a correspondent respecting the *ter quaterque vexata quæstio*—Who is a Doctor? But we really are afraid to publish it; for it would only lead to a vain and fruitless discussion, from which opposing parties would retire "of the same opinion still". We ourselves thoroughly agree with the opinion of our correspondent, that "a M.D., *Medicinæ Doctor*, is one who has taken that degree at an university, and none other"; but of what avails argument, against such conclusions as that arrived at, under legal authority, by the College of Physicians of Ireland? The College authorities now assume the right of giving the title of Doctor to their Licentiates!

MR. R. D. MITCHELL, a retired naval surgeon, residing at Henley, has been found guilty of manslaughter, under a coroner's inquest, for having caused the death of a female servant by starvation. He was subsequently committed by the magistrates to take his trial at the ensuing assizes at Oxford, bail being accepted. The case is one of the strangest we have met with of late; and, until more evidence appears, we abstain from offering any comments upon it. The accused "reserved his defence"; and, as far as we can learn from the papers, offered no explanation of the occurrence.

ANOTHER of those hideous excrescences of civilisation—a professional procuress of abortions—has been committed on a charge of wilful murder. One Mrs. Goddard of Leicester, undertook for one guinea to accomplish the object required by a mother of nine children. She received "the patient" *alone* into her house. The "patient" afterwards returned home—

> "Was taken ill, and died in a short period. From her statements just before death to her husband, who visited her, and from the appearances presented on the *post mortem* examination, no doubt could be felt that her death had been occasioned by the misconduct of the woman Goddard. The jury found a verdict of 'wilful murder' against the latter, and she was apprehended on the coroner's warrant, and committed to take her trial at the assizes."

WE have again this week to call attention to another specimen of the remarkable ignorance and presumption so often exhibited by coroners and their juries. The thanks of the profession and of the public are due to gentlemen like Dr. Watson and Mr. Payman, who thus show up the shortcomings of this class of officials, and so honourably maintain the dignity of the profession. Every week some flaw in coroner's law appears in print; and, even as we write, we see the following before us, which we give as another authentic specimen of how these things are managed.

> "REMARKABLE CASE OF POISONING. A very strange affair has occurred at Diss, Norfolk. A few days since, the youngest son of Mr. R. Aldrich was taken suddenly ill and died in a few hours, after suffering painful convulsions. Two other members of Mr. Aldrich's family were attacked in a similar manner, but recovered. The symptoms of the deceased were those of bilious diarrhœa, and he was found by the surgeon to be in a semi-comatose condition. The surgeon gave him a powder, and called again in an hour or two, when he found that another medical man had been summoned to the bed-

side of the sufferer, and that the symptoms were still more alarming, the child being convulsed, the pupils of the eyes very much dilated, and the thumbs curiously turned in. The poor boy died in the course of twenty-four hours after he was first attacked. A *post mortem* examination was made of his body, which presented a perfectly healthy appearance, with the exception of a perforation of the stomach about the size of a shilling—such as might have been caused by the action of a strong corrosive poison. The stomach did not present the appearance generally caused by the administration of arsenic or corrosive sublimate; but the examining surgeon is of opinion that the death of the boy was occasioned by the presence of poison in his system, although he cannot indicate precisely what that poison was. On these facts being stated, at an inquest held by Mr. E. S. Bignold, deputy-coroner for Norfolk, the jury requested that an adjournment might take place in order that the stomach might undergo a proper analysis. This the deputy-coroner said he should not feel it his duty to order. The jury then inquired the law on the subject, and, finding that the coroner had the option of acting as he pleased in the matter, they requested that a copy of the depositions should be forwarded to the Home Secretary. This course being also objected to by the deputy-coroner, the jury unanimously declined to return a verdict. The inquiry was eventually adjourned to enable the deputy-coroner to consult the coroner for the county upon the course to be pursued. If further action is not taken in the matter, there will be some public dissatisfaction."

The governors of the Queen's Hospital, Birmingham, have resolved to appoint a dental surgeon and an ophthalmic surgeon. This is the right way to cut the ground away from under the feet of the specialists. Leave them no just cause for action.

Within the last few weeks an action, which reflects little credit on its originators, was brought against Mr. J. S. Walker, a surgeon at Hanley, in Staffordshire. The defendant is a surgeon in successful practice, who formerly passed a very creditable studentship at King's College Hospital. It was alleged by the plaintiff that the treatment of his case had been unskilful, because there remained, at the end of six months, a slight projection of the inner ankle, after a severe fracture of both bones, extending into the ankle-joint. Mr. Furneaux Jordan, of the Queen's Hospital, Birmingham, and Drs. Wood and Hallam, of Newcastle (Staffordshire), testified to the great care, skill, and surgical knowledge, which had been shown in the treatment of the case. The verdict, we are happy to say, was for the defendant.

The Army Hospital Corps is in a semi-disorganised condition. A commission therefore has been appointed to investigate and report on it. The members of the commission are Colonel J. C. Kennedy, C.B., commandant of the Military Train; Deputy-Inspector-General H. Mapleton, M.D.; Dr. Sutherland, one of the Army Sanitary Commissioners; Surgeon W. J. Fyffe, M.D., 5th Dragoon Guards; and Purveyor-in-Chief, J. Scott Robertson.

THE LATE GEORGE NORMAN, ESQ.

George Norman, Esq., F.R.C.S., Consulting Surgeon to the Bath United Hospital, died at his residence in Bath, of pleurisy, on January 17th, 1861. Few men have passed through a more useful or a more active life than this excellent man and good surgeon. At the early age of 19, after a short stay in London, he passed the College of Surgeons in the year 1800, and returned to Bath, where his father had a good practice as a surgeon, and was the first surgeon to what was then little better than a dispensary—the future Bath United Hospital. Mr. Norman assisted his father both in private and public practice; and when the present hospital was built, he was the first surgeon appointed to it. The death of an elder brother made room for him in his father's practice at an early period, and he rapidly acquired the confidence and support both of his profession and the public, and with it a very respectable and remunerative practice. We believe that, in his best days, it was about £3,000 a year. After more than fifty years public practice, he resigned his surgeoncy to the Bath United Hospital in 1857, on which occasion the lower classes marked their sense of his services by presenting a testimonial to him. His bust was placed in the hall of the hospital, and his portrait adorns the board-room. As a surgeon, he was so continually the man of action, so engaged in the actual business of life, that he had little time, and probably less taste, for abstract thought. He was an active magistrate; an active politician, both general and local; and a painstaking, attentive man of business in his profession. His opinion was a good one, for it was founded on experience; and his treatment was sensible. But he has best deserved the grateful remembrance of his professional brethren from the tone of feeling which, if he did not originate, he undoubtedly fostered in his profession at Bath and its neighbourhood. He was always the unaffected English gentleman and man of honour. He won the good-will of his patients by his manners, and secured the confidence of his brethren who met him in consultation, by making them feel that he would not abuse a consultation and make it the means of securing a patient at the expense of the practitioner calling him in; and he reaped the just fruit of such a line of conduct, by making them look on him as one with whom it was perfectly safe to consult.

The present century has seen many greater men and greater surgeons than George Norman; but there are few of his own citizens who do not feel that in his death they have sustained a loss; and one of whom this can be said, must have played his part in life well, and is entitled to the inscripton—

"Exegi monumentum ære perennius."

We need hardly add, that he was a warm supporter of the interests of our Association. His funeral, which was to take place yesterday, was to be a public one; showing the high esteem felt for him by his fellow-citizens.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. General.	37, Soho Square.	Wed., Jan. 30, 4 P.M.

SHROPSHIRE ETHICAL BRANCH.

The Council of the Shropshire Branch beg to remind the members that their subscriptions to the British Medical Association and Medical Benevolent Fund for the current year became due on the 1st instant; and they will feel obliged if the members will remit the amount of the same by post-office order to Dr. Jukes Styrap, Hon. Sec.; punctuality in payment being most essential to the successful progress of the parent society.

Progress of Medical Science.

Statistics of Tracheotomy in Croup. Dr. Fenner, of Tennessee, gives the following interesting summary of the general results of the operation of tracheotomy in croup:—

"In France, tracheotomy in croup has been resorted to a great number of times, with a degree of success varying much with different operators. In the *Journal des Connaiss. Méd.*, June, 1839, we find the following statistical report: Operations, 140; cures, 28; deaths, 112. Amongst these are thirty-six cases operated on by five surgeons who ranked amongst the ablest operators of France, all of which proved fatal, while in one hundred and four other cases in which the operation was performed by three other surgeons, twenty-eight were successful. M. André, one of the interns of the Hôpital des Enfants, published an account of the operation of tracheotomy, in croup, performed in that institution during the year 1856, as shown in the following table:—Operations, 54; deaths, 39; recoveries, 15.

"The success of M. Trousseau and other operators has induced many to regard croup, as it occurs in France, as a diphtheritic form of the disease, differing from the inflammatory croup which is generally met with in this country. The former is principally confined to the throat and larynx; hence it is regarded as more favourable for an operation than the latter, which seems to poison the system, so that, even if the air has free access to the lungs, the disease still extends from the trachea to the bronchial tubes, and to the substance of the lungs, terminating in pneumonia and death. In Jan. 1857, Dr. Fuller read to the Royal Medical and Chirurgical Society, a paper on tracheotomy in croup. In regard to the supposition that there is a difference in the disease in the two countries, referring to the writings of French authors, and to the recorded results of the post mortem investigation of 311 fatal cases of croup in France, he showed that in regard to its pathological effects, diphtheritis, when accompanied by croupal symptoms, does not, as compared with inflammatory croup, present any greater prospect of success for the operation than it does in the character of its accompanying fever or the condition of the throat externally.

"Dr. West was placed by Dr. Fuller among those who opposed the operation: but Dr. West observed that so far from being an opponent of it, he had ventured to dissent from authorities high as Dr. Cheyne and Mr. Porter, and to advocate its adoption most decidedly. At the same time, his own personal experience of the operation, amounting to about ten cases, and that likewise obtained by his colleagues at the Children's Hospital, had not yet afforded a single instance of recovery. At the Children's Hospital every possible attention was paid to the circumstances in which the child was placed after the operation, while its performance was not delayed till the case was hopeless, but was performed comparatively early; and appropriate antiphlogistic treatment, including the employment of mercurials, was sedulously continued afterwards. He still believed that the difference in the character of the disease in England and France had much to do with the different results of tracheotomy in the two countries; and his own experience was that the cases of croup in this country, in which the affection of the larynx was unattended either by bronchitis or pneumonia, were a minority, and a very small minority of the total number.

"The numerous cures in France may possibly be accounted for by bearing in mind the fact that the operation is there generally performed in the second stage of the disease, or as soon as effusion of lymph begins to take place about the fauces. Every physician who has practised any considerable length of time has seen cases of croup recover, from the efforts of nature, or from the effects of medicinal agents; even when the false membrane extended far down into the larynx. I myself, a few months since, saw the case of a little boy, 6 years of age, who had been gradually growing worse from croup for ten days; a false membrane covered the fauces and extended to the trachea; respiration was exceedingly laborious, his face livid and swollen, and when I saw him he was insensible. I was urgently solicited by his parents, and others around his bed, to open the trachea as the only means of averting what they considered certain dissolution, but I was unwilling to perform the operation so long as there was any effort at respiration. The little fellow gradually revived and finally recovered, although it was many weeks before he regained his voice. Had I opened the trachea, from the condition he was in, I should have most certainly attributed his recovery entirely to the operation, and should have regarded it as a successful case of tracheotomy in croup. Doubtless many cases have been operated on that would have recovered if left alone, and the cure attributed to the operation. In a recent discussion at the Academy of Medicine, a distinguished member stated that in France, within the last few years, the mortality of croup had considerably increased, and he attributed this increase to the great number of operations which had been performed, thus adding to the dangers of the disease the dangers of the operation. If tracheotomy is performed early, before the urgency of the symptoms imperatively demand it, and the patient recovers, it is by no means certain that the recovery is due to the operation; hence the statistics of French surgeons, who advocate this treatment, are not considered by the profession in other countries as very conclusive in determining the value of the operation. My own opinion is, that it should never be performed except as a *dernier ressort*, when every other remedy has failed and death seems inevitable." (*North American Medico-Chirurgical Review.*)

Remarkable Case of Hydrophobia. Dr. W. R. Gore, of Limerick, was called to see a man who was reported to be in a state of "great excitement, labouring under fits of violent screeching." On entering the room where he was, Dr. Gore found a large number of persons, but not near the bed. The man's wife was endeavouring to hold a stout middle-aged person, who took a terrific fit of screeching, as Dr. Gore entered the room. His aspect was wild, and he grasped violently at the wife when the fit came on. Having got rid of the visitors, Dr. Gore commenced to explore the case, during which he was repeatedly interrupted by the violence of the fit and the intensity of the screeching. In the intervals he was calm and rational. The cause of the fit he attributed to an excruciating agony which, at each time, suddenly seized upon his penis, throwing him into the excitement described. He declared he had no other disease, and that if this was not cured he must soon die, "he could not stand the pain." The parts were perfectly healthy. During the process he had two attacks, but they produced no physical alteration in the organ. During one of these he attempted to seize and bite Dr. Gore: he made no such attempt upon the wife. On inquiry, Dr. Gore found that, on returning one evening from a brewery, where he was employed, he was seized by a dog said to be mad. He was brought to the infirmary, where the part was burned well with caustic; and though he remained there for two months it did not heal sufficiently to permit him to work. He spent five or six months in the workhouse hospital with similar results; and, the sore becoming chronic, he returned to his usual avocation, carting with an ass and car. He daily continued this avocation for six or seven months without any sickness, save a chronic ulcer of the left leg, which he dressed with ointment. Early on the morning of the day Dr. Gore saw him, he was suddenly seized with a fit such as has been described. He refused all nourishment. Every time Dr. Gore approached him with a drink, or that he saw the bowl of water, he got a violent spasm, screeched, thrust his hands to seize the penis, and shivered with contraction of the mouth and jaws. The patient was removed to the workhouse, and placed under the care of Dr. Brodie, the physician of that establishment. Notwithstanding the most energetic treatment, scarcely twenty-four hours elapsed before death put an end to his sufferings. Incessant spitting, extreme terror, violent convulsions, wild delirium, were succeeded by sudden prostration and death. The sore on his leg never healed. He had no recognisable premonitory stage, none of the pharyngeal spasm, except when attempting to drink, and the characteristic anguish was transferred by some sort of reflex action to the genitals. The bite was a severe one; the parts were much torn; nitrate of silver and the knife were the first remedies employed; every effort completely to cicatrise the sore failed, and the issue took fourteen months or so to smoulder before developing itself in a rapid and tragical death. (*Dublin Medical Press*, *Jan.* 9, 1861.)

ALBUMINURIA AS A SIGN OF KIDNEY-DISEASE. "Permanent albuminuria indicated," writes Dr. Parkes, "kidney-disease in thirty-two out of thirty-six cases; and if the heart-diseases be excluded, it may be said that it indicated kidney-disease exclusively." Of late the discovery of albuminuria in so many diseases has caused some scepticism as to the value of this symptom; but it would seem that the distinction of temporary and permanent albuminuria has not been drawn with sufficient care, and that if it be permanent, the significance of albuminuria is as great as it was suppposed to be by the older writers on Morbus Brightii. (*On Urine.*)

WHY IS NOT THE EXPIRED AIR RE-INSPIRED? Dr. Jonathan OSBORNE refers to this question, which he has not before seen noticed, in the *Dublin Quarterly Journal of Medical Science* for November. He says that, by the septum of the nose, the column of expired air is divided into two jets, which are projected downwards from the nostrils at an angle of about 45 degrees from the vertical axis, and divaricate from each other at an angle of 80 degrees. Each jet is propelled to a distance of ten or twelve inches from the nose before it rises, and is dissolved in the surrounding air. In addition, then, to the distance to which the expired air is projected by the act of expiration, it is sent off in a lateral direction, never to return; while the fresh air is inspired from another direction—that lying within the jets of expired air. This separation is accomplished, whether the individual be in the horizontal or vertical position, stationary or in a state of progression. It is only in lying on the side and inclining forwards that the direction of the lower jet is interfered with; and this, Dr. Osborne thinks, appears to be a principal cause of the general preference for lying on the back in summer or during close weather.

TRAUMATIC TETANUS TREATED BY CONIUM. Dr. CORRY of Belfast was called on March 26th, 1860, to see J. Russell, aged 55, who was labouring under symptoms of tetanus, which had set in two days previously. Ten days before Dr. Corry saw him, he had received a severe lacerated wound on the left hand, which had been crushed between two casks. The paroxysms were frequent: the patient had decided opisthotonos, and considerable trismus, with much difficulty in swallowing, and he could not lie down. Dr. Corry, acting on a suggestion made by Dr. Radcliffe, as to the near identity of the physiological action of conium with that of woorara, gave the man five grains of the extract, in water, every three hours; having previously evacuated the bowels by an enema of castor oil and turpentine. After twenty-four hours, the patient was able to lie down, and slept a short time; and the spasms were less acute. Forty-eight hours afterwards, he complained of general debility, with numbness and loss of power in the lower limbs; the paroxysms occurred at long intervals, and were much less severe; the pulse had fallen from 115 to 80. The medicine was continued, with wine, beef-tea, and eggs. At the end of a week, there was complete paralysis of the lower extremities; the upper limbs were much affected, and there was considerable difficulty in deglutition. The spasms and muscular rigidity had all but subsided; but there was some trismus: and, as he slept but little, a night-draught of morphia was occasionally given in addition to the conium. At the end of a fortnight, the muscles of respiration were becoming affected; the paroxysms had entirely ceased; and slight trismus alone remained. The amount and frequency of the dose was now diminished; and on the twenty-first day from its commencement it was discontinued, as every symptom of tetanus had disappeared. (*Dublin Quarterly Journal*, Nov. 1860.)

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 7TH, 1861.

A. B. GARROD, M.D., President, in the Chair.

ON THE MODE OF ACTION OF ALCOHOLS IN THE TREATMENT OF DISEASE. BY E. SMITH, M.D., LL.B., F.R.S.

THE aim of the author was to show, from the present state of knowledge, what is the true mode of action of alcohols, and the conditions of the system to which it is fitted, whether as separate diseases or as stages of disease. He first described the effects which are evident to common observation, both of a popular and precise kind; the former derived from every-day observation, and the latter from careful observations made during his own researches upon himself and others; and gave the following as the summary of his inquiries under this head:—The spirits may be excited, but all the functions of the brain and nervous system are lessened or disturbed. Muscular power, the secretions, and the action of the skin, are lessened; the action of the heart is reinforced. The increased sensation of heat is due to larger distribution of blood to the skin; but the diminished loss of heat is due to lessened evaporation. The sensation of cold in the reaction is due both to the withdrawal of the increase in the quantity of blood sent to the skin, and to the disturbed sensitiveness of the skin.

Dr. Smith said that there were no sufficient grounds for the assertion that alcohol is transformed and generates heat. He ascribed the defects in the inquiries as to the amount of carbonic acid evolved under its influence to arise from the very short duration of the experiments, to the mistaking of percentage for absolute amounts, to the unknown influence of foods, and to the defects in the apparatus employed. He then gave the results of his own researches. He found that alcohol, rum, and ales, increased the amount evolved; whilst brandy and gin lessened it, and whiskey varied in its action. Volatile aromata always lessened the amount of carbonic acid evolved.

In reference to the excretion of urea, he said that, in the experiments recorded by Hammond, it was clearly due to interference with the assimilative function, and to the accumulation of water in the system. The fæces were also retained; and, after the experiments, there was profuse diarrhœa.

Dr. Smith then explained the recent researches of M. Lallemand, by which the presence of alcohol in the excretions had been demonstrated; and he showed the presence of alcohol in the breath of one of the Fellows present who had recently taken alcohol. The test used was bichromate of potass—1 part to 300 of strong sulphuric acid. The summary of results was as follows:—

The essential actions of alcohol are—1. The reinforcement of the action of the heart, and the accumulation of fluid, whereby the pulse is filled and the blood distributed to the surfaces; 2. Lessening of the action of the skin, whereby loss of heat is lessened; and 3. The local action upon the stomach and alimentary canal. Alcohol is not transformed in the system, and does not produce heat. Its action upon the respiration is not its important action. It interferes with assimilation, and lessens the excretion of urea temporarily; but it has not been proved to lessen muscular waste. It may interfere with the digestion of starch, by lessening the salivary secretion. It lessens muscular power and the excretion of water by the kidneys. It has not been proved to increase nervous influence, except through its action upon the heart; but it lessens nervous power. It disturbs the balance of the circulation. It has two sets of actions, and the body gains an adapting power or tolerance of its presence.

There are other important elements than alcohol, viz., aromata, sugar, and gluten. The dose only affects the degree, and not the direction of the action.

The author then gave an analysis of Dr. Todd's views, which were based upon the chemical theory of the action of alcohols, and included the belief that alcohol increases nerve-nutrition, strengthens the heart, lessens the rapidity of the circulation, shields the tissues from oxidation and produces heat; and the sign which measured the necessity for its employment was the non-perception of the odour in the breath of those to whom it was useful. He then showed how far these views accord with present scientific proof, and arrived at the conclusion that, whilst the views of its action upon the heart and the circulation, and its non-inflammatory tendency, were correct, the value of the other statements did not rest upon scientific evidence, but upon the personal authority of Dr. Todd. He especially pointed out the omission of Dr. Todd in not referring to the action of alcohol upon the skin and the excretion of urea; but stated that the acetate of ammonia, which is known to act upon the skin, was a most frequent adjunct to his treatment; and that chloric ether and tannin were also commonly added to the large quantities of brandy given daily.

The author then pointed out the conditions of the system in which the use of alcohols was required, employing as a guide the essential action of alcohol upon the heart and the skin, and the derived action upon the excretion of urea, water, and fæces, and the assimilative process. The condition of general debility, innervation, and exhaustion; the stages of fever after the hot one had passed; delirium, coma, and other conditions in which it is desirable to increase the action of the heart and to lessen the excretions, were pointed out, and those separately indicated in which alcohol, aromata, and nitrogenous matters in ales, were severally beneficial. When alcohol was the agent needed, he recommended that it should be given as spirits of wine, both because of our being able to test its strength, and of our capability to obtain it tolerably pure in the early hours of distillation.

The President asked whether any experiments had been made with œnanthic ether, or with other of the wine ethers.

Dr. Gibb inquired whether it would be possible to estimate the amount of alcohol expired. He had believed that a portion of the alcohol taken in was converted in the system into fat.

Mr. Rogers-Harrison called attention to the various effects produced by alcohol in different persons on consciousness, volition, and the coordination of muscular motion; and asked how the difference was to be explained. He inquired also whether the author of the paper had made any observations on liqueurs; the rapid action of which probably depended on their containing prussic acid.

Dr. E. S. Thompson said that after what Dr. Smith had said, the alleged non-elimination of the alcohol in the breath in the cases referred to by the late Dr. Todd required a further examination.

Mr. P. Marshall inquired whether, in any of his experiments, Dr. Smith had inhaled oxygen after taking alcohol?

Dr. John Webster, in reference to the action of alcohols on the skin, had been led to believe that rum was a powerful sudorific.

Dr. Webb said that the number of experiments related by the author of the paper were too few for any conclusions to be based on them.

Dr. Salter referred to the conflicting views of the action of alcohol advanced by different authors in the present day, and to the necessity for further observations. Some facts mentioned by Dr. Smith had shaken his belief in the chemical theory of the mode of action of alcohol; but he did not think that all the conclusions arrived at by Dr. Smith had been proved. Besides noticing the elimination by the lungs and kidneys, it was also necessary to examine the skin, which removes a considerable amount of carbon. The excretion of the skin must be examined chemically; mere feeling is very fallacious, for the sensation of dryness is altogether independent of the amount of matter eliminated. That the skin threw off a large quantity of water under the influence of alcohol, he inferred from the diminution in the quantity of urine and the thirst which occurred on the day following the ingestion of spirits.

Dr. Smith was not aware that any experiments had been made upon œnanthic ether, other than his own on the inhalation of wines and spirits. He could not explain why alcohols seem to act more upon the cerebro-spinal tract in some, and more upon the brain in others; but it was simply a question of degree; and many agents which are admitted to have a defined action do vary in degree in different persons, and in the same person at different periods. The action of liqueurs is less due to the alcohol than to such compounds as hydrocyanic acid; and he mentioned the fact that, after taking some *kirch-wasser* in the early morning on the Tête Noir in Switzerland, his respiration was reduced so low as about 240 cubic inches of air inspired per minute, and he was almost as inanimate as a statue. It is highly probable, although not yet proved, that all the alcohol passes off untransformed ; and it continues to do so for at least eight hours,* whilst it is found in the brain unchanged as alcohol for thirty-six hours. It would be, as suggested by Dr. Thompson, very desirable to ascertain if the test will show the presence of alcohol in the breath of those in whom it is said the alcoholic fumes are not present; but, as only Dr. Todd and his pupils seem to have noticed the latter fact, the application of the test must be left to them. Dr. Smith had inhaled oxygen after taking alcohol, and had not found any difference in the effect which could be due to the alcohol; but his inquiries were still in hand. It was true that but few persons had been experimented upon ; but no good experiments could be made except upon one or two persons; and the experiments of Prout, Vierordt, Böcker, Coathupe, and Hammond, had been made upon the observer only. In reference to the action of alcohol upon the skin, Dr. Smith stated that, in his experiments, the amount of carbonic acid passing off by the skin was from one-seventieth to one-eightieth of that emitted by the lungs ; whilst a German experimentalist had found that it was one-fiftieth; but the quantity was quite insignificant when compared with that in food or that which passed off by the lungs. The true function of the skin is not the elimination of carbon, but the regulation of the heat of the body by the vaporisation of water. The true effect of alcohols in lessening the quantity of water passing off by the skin would, no doubt, be best shown by the collection of the amount before and after taking alcohol; and he would try to do it, but it was an experiment of exceeding difficulty. In the absence of this, he appealed to all professional experience if an active skin is not always regarded as a soft one, and more particularly a perspiring one; and if, in the hot stage of fever, when the skin is hot and dry, it is not admitted that the action of the skin is lessened. The action of sudorifics in fever is not that of collecting the vapour into streams, as is the duty of the hairs; nor to condense the vapour into fluid, as follows from lowering of the temperature; but to increase the actual rapidity and amount of evaporation. Alcohols have been abundantly proved to make the skin hot and dry, as a rule; and therefore to lessen the action of the skin. When, however, spirit and hot water are taken and drunk quickly, there may be a temporary perspiration, due to the ingestion of the hot water; but in a short time the true action of the alcohol shows itself. The skin gives off heat by radiation and evaporation. In the former manner, alcohols increase the loss of heat by sending a larger volume of hot blood to the skin; but in the latter manner, they lessen it, and in a degree quite to overpower the former action. When lithates are found in the urine after drinking alcohols, it may be either from the concentration of the urine, as occurs in night when compared with day urine; or from deranged assimilation of food.

Monday, January 21st, 1861.

A. B. Garrod, M.D., President, in the Chair.

THE NATURE AND TREATMENT OF THE MORE SEVERE FORMS OF STRICTURE OF THE URETHRA, ESPECIALLY WHERE INCISION HAS BEEN PREVIOUSLY RESORTED TO.

BY HENRY SMITH, ESQ.

It might appear, Mr. Smith said, that the subject of urethral stricture had been sufficiently discussed; but the repeated advocacy of new plans of treatment showed that much yet remained to be done. The deficiency was not in our knowledge of the pathology of the disease; this had been fully elucidated, in great part by the researches of Mr. Hancock. It was in regard to treatment that our knowledge was still unsettled; and the author believed that much good would arise from observing the results of the various methods which had been recommended.

The class of cases to which Mr. Smith desired particularly to draw attention were those characterised by extreme tightness, much irritability, great liability to recontraction, and a disposition in the system to resist the action of remedies. Many cases of this kind had fallen under his notice in recent years, and he had had opportunity of observing the effects of various modes of treatment on them.

The charge made against surgeons, of being too much disposed to regard stricture as a local affection, might or might not be correct; but certainly no one could avoid observing the connexion between the local disease and the state of the constitution. In some cases attended with great irritability, local treatment is found to be of no avail; and, on examination, the patient is found to have dyspepsia or renal disease. Such cases as these cannot be managed without preliminary constitutional treatment; and Mr. Smith believed even that recourse might be advantageously had to this measure in all cases. The good effects of such a proceeding were often well shown where it was imperatively demanded in consequence of an attack of intercurrent orchitis, etc., occurring in a patient with stricture.

Dilatation of the stricture, as carried out in the ordinary way, is notoriously ineffectual as a cure. Mr. Smith related a case which had come under his notice in which both more or less rapid dilatation and perineal section had been practised, with only temporary benefit. There were several points of interest in the case. First, it presented an instance of a severe and obstinate stricture occurring in an otherwise healthy person. (The patient was a gentleman, aged 39, and had had stricture thirteen years.) The case was marked by excessive sensibility and disposition to return; but there were no rigors nor retention of urine. Secondly, the case showed that there was no absolute cure for organic stricture; nearly every method of treatment having been tried with only temporary effect. The case also showed the real value of external incision in effecting a permanent cure; and it was like most of the cases Mr. Smith had seen, where this operation had been performed, and where recontraction had taken place. A return of the stricture might, *à priori*, be expected if the patient neglect to use the catheter after the performance of the external incision; but, if the instrument be steadily used, the return of the stricture can only be explained by the disposition to recontraction. The operation of external incision had been compared to lateral lithotomy; but the comparison was not just; one of the reasons being that, in the latter operation, the incision is made into a healthy tissue. In the case referred to, there was great induration at the seat of stricture; and, in employing gradual dilatation, Mr. Smith had never found more difficulty, it being nearly two months before a No. 9 catheter could be introduced.

How far is contraction influenced by internal incision? This operation is very easy; the danger is very slight; and the immediate results are highly satisfactory. But, sometimes rapidly, sometimes not until months or even a year or two have passed, there is a liability to recontraction—greater, the author believed, than after external incision. In cases where recontraction had taken place after internal incision, Mr. Smith had found that there was a sensation to the finger as if the catheter were passing over a long ridge at the part incised; and he could in this way almost always detect when internal incision had been practised. He believed that the condition in these cases was analogous to that of traumatic stricture.

Mr. Smith then related some cases, with the view of illustrating the tendency of stricture to return after external incision, even when dilatation is well kept up;

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* Dr. Smith has since shewn that alcohol passes off from the skin of the arm in man for several hours after it has been taken.

and of showing that the repeated performance of internal incision only makes the stricture more difficult to heal, notwithstanding that the surgeon who performed the operation may have been fully skilful. He would not discard internal incision, but would reserve it for stricture at the orifice or in the penile portion of the urethra.

The treatment followed by Mr. Smith in the obstinate cases to which he referred, consisted of the employment of very gradual dilatation; an instrument of the same size being used three, four, or six times, before the next was introduced. Gradual dilatation, Mr. Smith had found, could not be properly carried out by instruments constructed on the ordinary scale, inasmuch as they were by no means uniform in their gradations, and dilatation must be mathematically progressive. He had drawn up a catheter-gauge having regular increments of one-seventy-fifth part of an inch; and Mr. Matthews of Portugal Street had made according to this scale a case of fifteen catheters. Mr. Smith had not long used them; but he had already perceived their great advantage over the ordinary instruments. The method just now described should be followed in all cases where the patients could afford the necessary time; but where this was impossible, Mr. Smith also applied potassa fusa, which seemed to diminish the sensibility of the urethra, and thereby to render the stricture more amenable to the dilating action of the catheter.

Mr. Gay thought the author had rightly called attention to the uselessness of the ordinary means for the permanent cure of organic stricture; and his own experience confirmed that of Mr. Smith. Perineal section, in his experience, had been almost always unsuccessful in its ultimate results. He wished the author had dwelt more on the mode of production of stricture. As to stricture in young subjects, he did not believe it to be so frequent as is represented, but to be at first simulated by contraction of the urethral muscles, and then to be induced through laceration by the catheter employed to relieve the supposed stricture. He asked how Mr. Smith distinguished between the contraction arising from the organic stricture and that produced by muscular spasm, the occasional occurrence of which he believed to interfere with the regularity of dilatation.

Mr. Wade thought that most surgeons conversant with urethral surgery must have noticed the prevailing tendency to the use of the knife. As to the more intractable forms, he quite agreed with Mr. Smith that the secret of success consisted in proceeding gradually, introducing small instruments at first, avoiding anything like force. He believed that most strictures will yield to dilatation. But, in some cases, constitutional causes will render the local treatment difficult; and here potassa fusa will do more to prepare for dilatation than anything else. He had never done perineal incision and internal incision only under urgent conditions requiring immediate relief. He had found that some of the most difficult cases for internal incision had been those in which external or internal section had been previously practised. He preferred the potassa fusa, merely from its safety over incision.

Mr. Henry Thompson, while agreeing with Mr. Smith in many points, must yet differ from him as to incision of strictures. He had never advocated this method as a cure, but only as a means of often rendering a stricture dilatable. The objections made by Mr. Smith were theoretical and practical. The theoretical objection was, that a contractile cicatrix was produced by incision; but Mr. Thompson denied that there was any contraction in the cicatrix of a mere linear incision. To the practical objection he could oppose the anatomical result. A fortnight ago, a patient died who had been cut two years ago. There was no return of contraction, nor any contractile cicatrix; and, indeed, he could csarcely find where the incision had been made. He had done internal urethrotomy only twice in eleven months, although he had had a great number of bad cases. He regarded dilatation as the great remedy.

Correspondence.

ECCE ITERUM CRISPINUS! "CROWNER'S QUEST LAW" AGAIN.

Letter from Henry Dayman, Esq.

Sir,—The accompanying case, which exhibits the liberties a provincial coroner will occasionally take with the English law and with the pliability of a rural jury, might well be consigned to that limbo of insignificance where the "mighty instruments of little men" are hung up in honourable oblivion, but that the opinions delivered by the coroner involve a question of some importance to the medical profession and to the public generally.

The reputation of Messrs. A. and B., the surgeons mentioned in the narrative, is too firmly established to be shaken by the misdirection of any coroner; but, as it might be otherwise with younger members of the profession, it has been thought right, on public grounds, to ask the opinion of counsel on the questions at issue. The result of that inquiry is annexed.

Trusting you will give this communication a place in the Journal, I am, etc.,

Henry Dayman.

Millbrook, Southampton, Jan. 19, 1861.

Case.

A message is brought to Mr. A., a surgeon, requesting him to see a woman, living three miles from his house, who, on returning from church, had felt sick and giddy. Mr. A. is unable to go, being engaged with another case, but sends some medicines which he thinks suitable for sickness and giddiness arising, as he supposes, from a bilious attack. The messenger returns in an hour, and calls on Mr. B., another surgeon, and friend of Mr. A., to go and see the case. Mr. B. receiving the same message as Mr. A., and hearing that Mr. A. has sent medicines, does not think the case sufficiently urgent to require immediate inspection. The messenger does not return to Messrs. A. and B. again, though requested to do so if necessary. In a few hours (seven hours and a half) the patient dies of apoplexy, and just before death takes place, Mr. C., another surgeon, is sent for, from a distance of two miles, who arrives at the patient's house two hours and a half after death.

An inquest is held on the body, and, after a lengthened examination of witnesses, the coroner asks Mr. C. whether, if he had received the message delivered to Messrs. A. and B., he would have considered the case merely one of "biliousness." Mr. C. answers in the affirmative. The coroner then asks Mr. C. whether, in his opinion, the patient's life was shortened by the absence of Messrs. A. and B.; to which Mr. C. replies in the negative. The coroner then tells the jury that had Mr. C. given it as his opinion that the patient's life had been shortened by the absence of Messrs. A. and B., he (the coroner) should have directed the jury to find a verdict of manslaughter against Messrs. A. and B.

Questions.

1. Is the opinion of one surgeon sufficient evidence in a court of law to warrant a jury in finding a verdict of manslaughter against two others?

2. Can the refusal of a surgeon to visit any case be construed into non-compliance with a legal obligation? and if so, how far in a fatal case would the law recognise such refusal as an unlawful omission to do some act by which "involuntary homicide" resulted?

3. In the case in point, did the sending the medicines constitute the sick woman Mr. A.'s patient? If so, was the death to be attributed to unskilful treatment, and, in that case, how would the law deal with it?

Answers to the Questions generally.

It is impossible that B., who neither went nor sent medicines, could be implicated in the matter, for there is no law that *obliges* a medical man to attend any case.

The only way that A. could be reached would be by *action* for unskilfulness (if the medicines sent turned out to be improper for the actual malady) on the ground that he ought to have seen the patient *before* administering physic. He could not be *criminally* answerable unless the character of the medicine was such as to be dangerous in itself, and so only to be given in certain well ascertained ailments, when it might possibly be held that his negligence was so gross as to amount to a crime.

HOSPITAL CHARITY.

SIR,—In your correspondence of this day's JOURNAL, I find a letter from "A Dispensary Physician," pointing out what he regards as a material defect in the administration of our eleemosynary charities. This is a subject to which I have for many years past directed my attention; and I have often sought to excite in others the conviction that these charities never will be properly administered until the medical element of society takes its share in the work. I entirely agree with the "Dispensary Physician," that no class of men are more capable of rendering effective service in the distribution of alms than medical men. I have visited a great deal among the poor, and I still frequently seize an opportunity of seeing them in their own homes. But my experience is to this effect, that the deserving sick poor are not visited as they ought to be, and that there is no link between them and the various charities, which, to judge by the *Times*, are most liberally supported by the public.

In nine cases out of ten that the physician visits among the poor it is kitchen physic and good nursing that is wanted, rather than the pill and mixture; and if he has any milk of human kindness in his breast he finds that a drain is caused upon his pocket, which actually forbids a repetition of visits which he finds useless as regards purely medical purposes.

There must be frightful mismanagement somewhere, or our poor-rates would not be what they are, and the amount of relief afforded so manifestly inadequate. I am satisfied that by establishing a mutual understanding between the medical profession, the clergy, visiting societies, and the philanthropic world generally, a large amount of sickness and suffering could be arrested and allayed, which now runs on hopelessly to death or pauperism.

Let recommendations from medical men, above all others, be attended to, with such guarantees as to their correctness and justice as may be necessary, and let sickness be the highest and chief qualification for relief freely and liberally given. But let all pet-paupers, all malingerers and impostors, be discouraged to the utmost. Let them pick oakum or sift cinders, but do not allow them to wheedle alms, and food, and clothes, out of curates and visiting ladies, while the stalwart labourer, or the mechanic's honest wife, are breaking their hearts because they cannot obtain that aid in sickness for themselves or their families which their rich neighbours intended for them.

I say again, and most emphatically, the deserving poor of this metropolis are not found out by the clergy or by visiting societies, nor will they be until the certificates of medical men are the primary condition of relief.

If you agree with the "Dispensary Physician," I trust you will again bring the matter before your readers, and doubtless the truth will ultimately dawn upon the general public. I am, etc.,

A HOSPITAL PHYSICIAN.

London, Jan. 19, 1861

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. At the Comitia Majora Extraordinaria, held on Thursday, Jan. 17th, the following gentlemen, previously extra-licentiates, were admitted members under the bye-law applicable to extra-licentiates of the College:—

Keess, James, M.B., Madras
Muller, Charles, Sydney, New South Wales
Rooke, Benjamin Proctor, M.D., Bombay

At the same Comitia, the following were admitted members, having been previously elected under the temporary bye-law (now expired) relating to graduates in medicine:—

Harris, Worsley Poulett, M.D., Lucknow
Yeo, Gerald, M.D., Her Majesty's ship *Ganges*

APOTHECARIES' HALL. On Thursday, January 17th, the following licentiates were admitted:—

Cooper, G. F., Reading
Moorish, T. Fry, Ledbury

APPOINTMENTS.

ROYAL ARMY. The following appointment has been made:—

PAIN, G., Esq., Staff-Surgeon, to be Surgeon 53rd Foot, *vice* J. S. Grant, M.D., deceased.

ROYAL NAVY. The following appointments have been made:—

BAIRD, W. J., M.D., Surgeon, to the *Spiteful*.
CHAMBERS, Charles H., Esq., Surgeon, to the *Trident*.

VOLUNTEER CORPS. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

COUCH, R. Q., Esq., to be Surgeon 1st Battalion Cornwall R.V.

To be Honorary Assistant-Surgeons:—

ALDERSON, R. R., Esq., 11th Derbyshire R.V.
BRADLEY, R. H., M.D., 1st Battalion, 13th Corps, Kent R.V.
COWPER, J. A., Esq., 10th Forfarshire A.V.
EVANS, D. P., Esq., 4th Montgomeryshire R.V.
FREELAND, J. E., Esq., 5th Renfrewshire R.V.
PERMEWAN, J., Esq., 17th Cornwall R.V.
SMITH, J. W. F., Esq., 3rd Forfarshire R.V.
VINCENT, P., Esq., 2nd Cornwall R.V.
WILLIAMS, J., Esq., 3rd Cornwall R.V.
WISE, W. C., Esq., 1st Brigade, 6th Corps, Kent A.V.

BIRTHS.

Of sons, the wives of—

*WARDELL, J. R., M.D., Tunbridge Wells, on January 20.
WARD, J. Haydon, M.D., St. Peter's, Sydney, on Nov. 19, 1860.

Of daughters, the wives of—

*BROWN, Frederick James, M.D., at Rochester, on January 22.
SMART, W. R. E., M.D., Deputy Inspector-General of Hospitals and Fleets, at the Royal Naval Hospital, Bermuda, on Dec. 28, 1860.

DEATHS.

ALLEN. On January 9, at Hammersmith, aged 43, Mary Anne, eldest daughter of M. Allen, M.D., late of High Beech, Essex.
DAVENPORT. On January 11, at Paris, Eliza Lamb, wife of James Davenport, M.D., late Bengal Army.
DEALEY, Charles, Esq., late Surgeon in the Army, in Edinburgh, on January 18.
FISHER, Henry, Esq., Surgeon 4th Regiment, aged 36, on Jan. 13.
*HASE, Henry, Esq., Worksop, aged 52, on January 16.
MAUNOIR, J. P., M.D., at Geneva, aged 92, on January 16.
*NORMAN, George, Esq., at Bath, on January 17.
PRICHARD. On January 18, at Laleston Cottage, Bridgend, Ellinor, wife of *William Prichard, Esq.

The Medical Society of London has passed a resolution, recommended by the Council, in favour of a monthly publication of the Transactions of the Society.

Miss Nightingale. We regret to learn that the malady under which this estimable lady is suffering, far from being alleviated, increases upon her, and her state, which confines her entirely to her apartment, is one of great exhaustion and severe suffering. (*Standard.*)

The Jacob Medal is now completed. On one side is an admirable likeness of the man whom it is intended to honour, and on the other side the inscription:—In Commemoration of Eminent Services rendered to Science and the Medical Profession in Ireland. (*Dublin Med. Press.*)

Infringement of the Lunacy Laws. On Friday week, Dr. H. E. C. Kelly, of Pinner, was committed for trial, by Mr. Henry, the Bow Street Magistrate, on a charge of receiving into his house a lunatic, to board and lodge for profit, the house not being licensed for that purpose, and there being no certificate of two medical men as to the lunacy of the patient. The defendant was admitted to bail in two sureties of £50 each.

The Queen's Hospital, Birmingham. The munificent donation of £1000 has been presented by Joseph Guest, Esq., per Mr. Sands Cox, in aid of the hospital, on the condition "that there be given to the incumbent of St. Edmund's Church, Dudley, in his name, six inpatients' tickets for ever after his decease." Congregational collections at the churches and chapels to the amount of £3433 : 6 : 4 have been paid over to the treasurer of the charity.

The King and Queen's College of Physicians in Ireland, having had before them the opinion of the Right Honourable the Attorney-General for Ireland, and the Solicitor-General for England, that their Fellows and Licentiates were legally entitled to the degree and title of Doctor of Medicine, and that they were legally empowered to embody such in their diploma, have adopted the following form into their bye-laws:—"We, the President and Fellows of the King and Queen's College of Physicians in Ireland, having duly and deliberately examined (A.B.) in the Principles and Practice of Medicine, and in the accessory sciences, and having found him well versed therein, do by these presents grant to him licence to practise in the Faculty of Physic, and do certify that he has obtained, and is hereby entitled to, the degree, title, and qualification of Doctor of Medicine and Licentiate of the said College. In testimony whereof we have hereunto subscribed our names and affixed our common seal at the College Hall, in the City of Dublin."

Mortality in London. For the week ending January 19th, the mortality of London was very high. Cold weather of a few weeks duration will kill many persons at the period of its greatest rigour; and afterwards its fatal effects are not lessened, but appear to accumulate. In the last five weeks the mean weekly temperature has not been higher than 32·4°, nor lower than 25·9°; in this period the two coldest weeks were the second and the fourth; and the numbers of the deaths were successively 1269, 1407, 1707, 1707, and (in the week that ended on January 19th) 1926, exceeding the estimated number by 585. Pulmonary complaints, exclusive of phthisis, carried off in the week 702 persons, the average being only 301. From bronchitis 471, the average being 164; those from pneumonia are 155, against 94; those from asthma 57, against 23. Forty-four deaths were caused by apoplexy, the average being 30; 43 by paralysis, against an average of 27. Heart-diseases were fatal in 119 cases, whilst the average is only 53. Of 120 persons who died at the age of 80 years and upwards, 12 were nonagenarians, all women except 4. The oldest was a widow aged 99 years and ten months. Besides these, a centenarian is recorded, who is stated to have died at the age of 101 years. She was the widow of a chairmaker, and her death occurred on the 15th instant, at 30, Cleveland Street.

The Treatment of Soldiers in Barracks. Professor Syme, of Edinburgh, has addressed a letter on this subject to the *Times*. He says: "While so much is said and done to improve the condition of agricultural labourers, it seems surprising that the domestic arrangements for soldiers should be treated with such apathetic indifference. When the 78th Highlanders returned from India, they were received in Scotland with the respectful regard due to their distinguished services, and when this fine body of men march through our streets with their bronzed countenances and breasts covered with decorations we feel a thrill of pardonable pride in possessing a regiment that has done so much credit to its country. Having lately had occasion to visit the Castle, in which the only barrack for infantry in Edinburgh is situated, I was surprised to find the scanty accommodation provided by Government for these gallant veterans. The married men are stowed away on the ground floor, in low, narrow, ill-ventilated rooms, of which the area is equal to twenty feet square, the walls are six feet high, with the ceilings slightly arched towards the centre, and the solitary window, about half the size of an ordinary one, is placed at the end, opening into a corridor. I visited three of these singular apartments, and learnt that each contained *three married couples*, with from six to ten children, of ages between three months and twelve years. Of the single men a large portion are packed into storehouses, with crazy skylights and stone floors, in numbers so disproportioned to the space, that when the beds, which stand close together, are let down at night they overlap each other at the feet, and thus convert the whole surface into a uniform plane, whence, the lights being extinguished at nine o'clock, none of the twenty soldiers who form its complement can escape for any purpose whatever, except by stumbling over the bodies of their sleeping comrades."

Oliver Goldsmith had little pretension to the title of a practitioner of medicine. He passed about eighteen months at Edinburgh, where he picked up some superficial knowledge of chemistry and natural history. Thence he went to Leyden, still pretending to study physic. "He left that celebrated university," writes Macaulay, "the third university at which he had resided, in his twenty-seventh year, without a degree, with the merest smattering of medical knowledge." In 1756, he landed from his continental wanderings "without a shilling, without a friend, and without a calling." If his own evidence can be trusted, he had obtained a doctor's degree from the University of Padua; but it proved useless to him. He turned strolling player. He pounded drugs, and ran about London with phials for charitable chemists. He at length obtained a medical appointment in the East India Company's service, but, for some unexplained reason, it was soon revoked. "Then he presented himself at Surgeons' Hall for examination as mate to a naval hospital. Even to so humble a post he was found unequal." He then, at thirty, took to a garret and "sat down to toil like a galley-slave." In literature he was now successful; but of physical sciences he was profoundly ignorant. "In his *Animated Nature*, he relates with faith and with perfect gravity, all the most absurd lies which he could find in books of travel about gigantic Patagonians, monkeys that preach sermons, nightingales that repeat long conversations. 'If he can tell a horse from a cow,' said Johnson, 'that is the extent of his knowledge of zoology.' On one occasion he maintained obstinately that he chewed his dinner by moving his upper jaw." He squandered away the large sums he received for his works; and gradually his health sank under his embarrassments. "Notwithstanding the degree which he pretended to have received at Padua, he could procure no patients. 'I do not practise,' he once said; 'I make it a rule to prescribe only for my friends.' 'Pray, dear doctor,' said Beauclerk, 'alter your rule, and prescribe only for your enemies!' In spite of this excellent advice, he prescribed for himself, and aggravated his malady. He became more restless and weaker. 'You are worse,' his medical attendants said, 'than you should be from the degree of fever which you have. Is your mind at ease?' 'No, it is not,' were the last recorded words of Oliver Goldsmith."

Antiquackery Movement in the Olden Time. Our ancestors, of above four hundred years ago, were wide awake to the evils arising from the practice of medicine by unqualified pretenders. In the ninth year of the reign of Henry V (1421), the physicians addressed the following sensible petition to the King and Parliament:—

"Hey and most myghty Prince, noble and worthy Lordes Spirituelx and Temporelx, and worshipfull Co'es, for so moche as a man hath thre things to governe, that is to say, Soule, Body, and wordly Goudes, the whiche ought and shulde ben principaly reweled by thre Sciences, that ben Divinite, Fisyk, and Lawe, the Soule by Divinite, the Body by Fisyk, wordly Goudes by Lawe, and these conynges sholde be used and practised principaly by the most connyng men in the same Sciences, and most approved in cases necessaries to encrese of Vertu, long Lyf, and Goudes of fortune, to the worship of God, and comyn profyt. But, worthy Sov'aines, as hit is knowen to youre hey discrecion, many unconnyng an unapproved in the forsayd Science practiseth, and specialy in Fysyk, so that in this Roialme is ev'y man, be he nev' so lewed, takyng upon hym practyse, y suffred to use hit, to grete harme and slaughtre of many men: Where if no man practised theryn but al only connynge men and approved sufficeantly y lerned in art, filosofye, and fisyk, as hit is kept in other londes and roialms, ther shulde many men that dyeth, for defaute of help, lyve, and no man perysh by unconnyng. Wherfore pleseth to youre excellent Wysdomes, that ought aft' youre soule, have mo entendaunce to your body, for the causes above sayd, to ordeine and make in Statuit, perpetually to be straytly y used and kept, that no man, of no man' estate, degre, or condicion, practyse in Fisyk, from this tyme forward, but he have long tyme y used the Scoles of Fisyk withynne som Univ'sitee, and be graduated in the same; that is to sey, but he be Bacheler or Doctour of Fisyk, havynge L'res testimonialx sufficianz of on of those degrees of the Univ'site in the whiche he toke his degree yn; undur peyne of long emprisonement, and paynge XL li. to the Kyng; and that no Woman use the practyse of Fisyk under the same payne: And that the Sherrefe of the Shire make inqusicion in thaire tornes, if ther be eny that forfaiteth ayens this Statuit, under a payne resonable, and theme that haz putte this Statuit in execucion without any favour, und' the same peyne. Also, lest that thay the whiche ben able to practyse in Fisyk ben excluded fro practysing, the which be nought graduated, Plesith to youre hey prudence, to send Warrant to all the Sherrefs of Engelond, that ev'y practyso' in Fisyk nought gradeuated in the same science that wile practyse forth be withynne on of the Univ'sitees of this lond by a c'teine day, that they that ben able and approved, aft' trewe and streyte examinacion, be receyved to theyr degree, and they that be nought able, to cese fro the practyse in to the tyme that they be able and approved, or never more entremette therof; and that therto also be iset a peyne convenient."

In answer to this petition an ordinance in Norman French was issued, of which the following is a translation:—

"*Item*, to remove the evils and dangers which have continued for a long time among the people of the realm, through those who have used the arts and practice of physic and surgery, pretending to be well and sufficiently learned in the said arts, when in truth they are not so; to the great deception of the people. It is ordered and agreed to in this Parliament, that the Lords of the King's Council for the time being have power, by authority of this Parliament, to make and put in force proper laws against those persons who shall henceforth continue to meddle with and use the practice of the said arts, when they are not skilful nor approved in the manner proper for the same arts; that is to say, for physic, in the universities; and for surgery, by the masters of the art. And let this be done as it shall seem to the said Lords most convenient and necessary in the case, according to their good judgment and discretion, for the safety of the people."

TO CORRESPONDENTS.

⁂ *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

The Journal.—Sir,—As an old member of the Association, I cannot help thanking you, and congratulating my fellow-associates upon the altered shape of our Journal. Its spirit too seems to have changed, although inversely with its size; but, just now, I have only to do with the latter.

Whilst loads of *Lancets* and *Medical Times* are now mouldering in dusty obscurity somewhere or other in my library, awaiting their too probable and inglorious a doom at some neighbouring butterman's, simply from the fact, that my shelves already groan under the weight of their predecessors, I am anticipating in the new series of the British Medical Journal, annual volumes, both of reasonable and readable dimensions. The very change is refreshing! If I were to claim the Englishman's privilege of finding fault with something, I might perhaps say, that I think the margins are rather small:—but the size of the page is *the very thing.*

Your obedient Servant, F.R.C.P.

I enclose my card.

[Our Correspondent will shortly be contented also in the matter of margin. The size of each number of the Journal, in respect of superficial extent of letter-press, is greater than has been ordinarily given in the recent volumes.]

Another distinguished member of the Association writes:—

"I like your idea of lessening the size of the Journal page for two reasons:—it will be a distinguishing mark from the *Lancet* and *Medical Times*, and it will bind better. Moreover, the former size was neither flesh nor fowl; neither large enough to read folded like a newspaper; nor handy enough to read like a pamphlet. I always thought the old size of the *Medical Gazette* the nicest.

"I would have a clear type, as large as can be afforded, for those who feel that eyes may become no eyes in time.

"I hope other people will agree with you and me in this."

A Correspondent writes:—"I take this opportunity of saying that I concur with your remarks respecting the price and value of the Journal. In fact, every member gets more than his money's worth for his subscription."

We beg to inform "A Governor" that we do not consider the salary or the appointment of a chaplain to a public medical charity is a subject which permits of discussion in a medical journal.

One of the Rejected.—We are satisfied that our correspondent, "One of the Rejected", will, on reflection, agree with us, that his letter was never meant for publication.

Dr. Hill.—We beg to call Dr. Hill's attention to a second notice of Virchow's labours in our number of this day; and also to some very remarkable researches of Dr. Lionel Beale into the minute structure of tissues, which will shortly appear. Perhaps these articles may induce him to modify somewhat his opinion. His criticisms shall receive early consideration.

Clinical Lecture

ON BRONCHO-PNEUMONIA.

DELIVERED AT
ST. MARY'S HOSPITAL, JANUARY 19th, 1861.

BY

THOMAS K. CHAMBERS, M.D., Censor of the College of Physicians of England; Physician to St. Mary's Hospital, London.

At the latter end of last week there was a very peculiar state of weather. The barometer was very high. The air was excessively cold, dry, and deficient in electricity. At the same time there was a thick yellow fog of smoke, an unprecedented quantity of solid matter being suspended in the air. Each of these conditions separately, I enumerated to you in the Lectures on Medicine, as causes of pneumonia; and, consequently, when they are all united, it is not wonderful that the disease should prevail. Eight cases came under my care alone in this Hospital in six days, and they all assumed the form of the disease usually observed when it becomes epidemic; viz., broncho-pneumonia. I attribute this to the quantity of ammoniacal, sulphurous, and carbonaceous matter inhaled during these fogs. When you remember the stinging of the eyes and nose, and the nauseous taste and smell experienced when walking through the streets, you can hardly wonder that the bronchial membrane should suffer. The wind resembled the noxious exhalations from Vesuvius, which Virenzi, in a letter to Haller, says, also produce epidemic pneumonias.

I am not going to trouble you with the details of all these cases, but to make cursory notes upon several, as I run through the records.

With regard to the whole, I may remark that none were in complete health before the attack; every one that could speak, acknowledged either to chronic wheeziness, debility, ague, drinking habits, or some other evidence of chronic ailment. As far as I have been able to observe, this is the rule in short epidemics of pneumonia; invalids are the first to suffer, and it is only after a long duration of the epidemic that the healthy are attacked in great numbers. This is noteworthy, because it is the reverse of what happens in cholera, small-pox, and some other zymotics, in epidemics of which the strongest are often the first struck down.

I shall take first James A., because in his case I am unfortunately able to illustrate the morbid anatomy of the disease by ocular demonstration.

James A., aged 34, a coachman, admitted on January 11th, has suffered for seven or eight years every winter from cough, accompanied very often by hæmoptysis, and for the last three years by cold night-sweats. During the spring and summer he is pretty well, and able to continue his avocation, but each winter his attacks get worse and worse.

So far, the history is descriptive of a case of chronic pulmonary consumption; but the record goes on to say:

During the last four days, he has experienced a very great increase of shortness of breath, and has had excessive palpitation of the heart, and pain in the situation of that organ. The sputa have also diminished in quantity, and become more thick and tenacious. He has had also frequent rigors. He was on admission quite unable to lie down in bed; the lips were purple; the tongue was white and furred; the pulse 120, small; the urine thick. The upper lobes of both lungs, but especially of the left, are dull on percussion. There is also comparative dulness beneath the right scapula as compared with the left corresponding region. There are high-toned, whistling, and crepitant râles throughout the chest, and fine crepitation in the right inframammary region.

Here was clear evidence in the history of recent inflammation, added to his chronic disease. The auscultatory "trumpet gave an uncertain sound", may be said by those who are sceptical of their ears; and doubtless it was puzzling, from the mixture of chronic and acute disease. Yet it led us to guess, as you may remember, at pneumonia in the right lower lobe, which proved correct in the sequel. The symptoms were very urgent, and I gave an unfavourable prognosis, grounded principally upon the dyspnœa, the best guide I know to prognosis in this disease. He was treated actively, was bled once to eight ounces, had eight leeches on, and a fourth of a grain of tartar emetic every three hours. The whole chest was also enveloped in a large poultice. I should have liked to take blood by cupping, which gives more local relief than any other form of blood-letting; but the skin was sore from the application of a large blister to the side. I beg you will never put on blisters at the beginning of pneumonia. Not only are they useless, perhaps even hurtful, in themselves; but they certainly are indirectly injurious, by preventing the patient from being cupped.

The treatment gave only temporary relief to the dyspnœa, which soon returned, and made the poor fellow's death, two days afterwards, a very painful one. The lungs, which I show you here, have the upper lobes filled with tubercles of old date, some cheesy, some cartilaginous, some chalky. In the left are several small vomicæ. You may remember that this left apex was the duller of the two; and it may surprise you to find in it vacant spaces, whereas the other is all solid. Though beside the present question, I will call your attention to this; because, contrary to what is asserted in some books, I have constantly found it to be the case, that small vomicæ filled with pus cause a duller sound on percussion than complete consolidation. Do not forget this in your examination of patients.

The right lower lobe, as was expected, is inflamed; but you will observe there is a difference between the front and the back parts. The latter does not crepitate when you squeeze it with your fingers, the whole mass is condensed and solid; the front has patches of lobular condensation scattered amongst crepitant parts. The same irregular patches of lobular condensation are scattered over the lower lobe of the left lung. The lobar mass of condensation had given rise to dulness; the lobularly pneumonic parts were resonant. Very important this; it shows you cannot expect to find out lobular pneumonia by percussion.

Observe throughout how deeply stained red the mucous membrane of the bronchi is; and how throughout the lungs, in old tubercular parts, in the generally consolidated parts, in lobularly consolidated parts, in the crepitant parts, the smaller bronchial tubes are oozing out a thick secretion. Very little aeration could have been going on in this lung. And observe that the extent of the signs of pneumonia could have been no guide to you of the extent of non-aeration, or of the danger. The dyspnœa, which we went by, was a better guide.

It is in broncho-pneumonia, or inflammation which arrives at the lungs through the bronchi, that you find generally this lobular form of condensation; an insidious form, which often evades our stethoscopic investigations, and distracts our prognosis. Broncho-pneumonia is also remarkable as being much less often accompanied by pleurisy than other forms. You may see here the pleura quite free and transparent; a rare phenomenon in pneumonia, which usually causes inflammation of the serous membrane in its neighbourhood.

The absence of pleurisy in broncho-pneumonia is often marked in the pulse, which is much softer, and wanting in that wiry character distinctive of the disease when this is accompanied by inflammation of serous membranes.

Joseph C., aged 22, a labourer of temperate and regular habits, was admitted January 12th. Last winter he had a bad cold and cough, which laid him up for four months, during which time his sputa were often streaked with blood. He caught a fresh cold at the beginning of December, which got worse as the winter wore on. Two days before admission, he had severe shiverings when in bed, and not exposed to the cold. On admission, his pulse was 96, the tongue white and furred. There were considerable dyspnœa, and lividity of the lips. The breath-sounds were natural and full beneath the scapula, and the breathing puerile on the left side in front. But the right front was dull, especially the upper part; there were coarse râles in the upper lobe, and fine crepitation in the lower. There were specks of blood in the sputa.

The diagnosis was chronic disease of the right upper lobe, inducing acute inflammation of the lower *in the front part.* Note here, as in the last case, it is not *congestive* pneumonia, not an inflammation of the parts into which blood has gravitated by mere dead weight, but an *active* inflammation with which we have to deal in broncho-pneumonia. Congestive pneumonia occurs in the back part only; this in the front, in scattered parts, lobularly, everywhere.

The patient was bled to ten ounces, had a quarter of a grain of tartar emetic every other hour, and a large poultice wrapped round the chest. The relief from the venesection was immediate, and not transitory. On the 14th, there was great relief to the pain and to the cough. On the 16th, in spite of the antimony, there was an increased appetite for food, the skin being soft and natural. The dulness on the right side continues, but the fine crepitation is exchanged for snoring râles. On the 19th (to-day), there are coarser râles throughout the lower lobe, and the patient is progressing most favourably.

This is an instance of active treatment being pursued in spite of the likelihood that the patient had old chronic disease, and apparently with the happiest results. I believe we are generally too much afraid of active treatment lowering the strength. I do not believe any treatment, however active, lowers the strength so much as the continuance of acute disease; and therefore, if it gives me a means of curing that acute disease, I adopt the active treatment, in spite of the possible debilitating effects of it. Consider this case: four or five days good food, with a good stomach, will repay the ten ounces of blood took from him; but four or five weeks feeding would not have replaced the loss which would have accrued from the continuance of the pneumonia.

Wm. J., aged 29, a powerful excavator, admitted Jan. 11th. His habits have been often intemperate; he had ague seven years ago, and last autumn was in hospital for rheumatism in the knees for a month. After this, he was pretty well till six days before admission, when he was woke up at night by a severe shivering, followed by perspirations. These rigors returned several times before he came into hospital; and there was severe cough, of a loud ringing character, with frothy sputa. On admission, the tongue was clean; the pulse was 110, irregular, and especially intermittent when he coughed. There was deficient respiration on both sides beneath the scapulæ, and there was more dulness on percussion on the right side than the left. There was also dulness and fine crepitation in the right inframammary region. In a very circumscribed spot beneath the left mamma, there was pleuritic rubbing, accompanied by no pain.

Here you have a third case of pneumonia, lobular through the greater part of the lung, but lobar in the right lower lobe. Its apparent affection for this one spot is not a rule; it is a mere accident that it should happen in three cases running. The pleuritic rubbing demands notice, because, as I said before, it is less usual in this form of pneumonia than in others. This exception seems a confirmation of the rule; for you see it is *not* adjacent to the most inflamed lung, but on the opposite side.

Remark the note about the pulse: its intermittence during coughing is a sign of debility, and often of that particular form of debility which follows intemperate habits; it led to my inquiring about them, and made me determine not to bleed the man from the arm, in spite of his muscular aspect. He was, however, cupped to eight ounces, and the usual great linseed poultice put round his chest. He had also

℞ Antimonii pot.-tart. gr. ¼; syrupi papaveris ʒj; misturæ camphoræ ad ℥j. M. Fiat haustus tertiis horis sumendus.

The antimony did not produce nausea, nor did it prevent his appetite from returning; so that, on the 16th (five days after its commencement), he was begging for more to eat than the milk, bread, and beef-tea, which he had been ordered. On examination of the chest, the fine crepitation beneath the right mamma was replaced by coarse crepitant râles; the pleuritic rubbing was not continuous, resembling creaking leather; and on the 18th it had disappeared, the two surfaces having become adherent. He will soon be convalescent.

Remark here how antimony and blood-letting, when required by disease, and spending their force upon it, do not lower the vital powers. The appetite may be taken as an excellent index of those vital powers; and when it steadily and gradually returns to its normal condition, depend upon it they are on the increase.

I said that his chest was enveloped with the "*usual*" poultice. I think this a very important part of the treatment of pneumonia, especially of the inflammatory, non-congestive, lobular kind. In the first place, it acts as poultices and hot fomentations do to inflamed parts in surgical practice, soothing the irritable over-sensitive nerves, encouraging the capillaries to relieve themselves by exosmosis, etc. Secondly, it defends the part against changes of temperature, which, however slight, are highly injurious. Thirdly, it mixes a warm steam with the inspired air, by diffusing it for at least a foot or two from the patient. A damp warm atmosphere is of great importance in pneumonia; and you may have observed that I have endeavoured to secure it by having basins of warm water placed about the wards, in addition to the poultices.

John D., aged 39, a dustman, was admitted Jan. 16th. He stated that he had been subject to what he called a little chiselling cough for five years, but never so as to be prevented from working. He was in the habit of taking as much gin as he could get. A week before admission, he went to his labour as usual at 6 a.m.; but at about 9 o'clock he was seized with such a severe shivering fit that he was unable to stand, and was carried home to bed. The dyspnœa was very great, but still he had no medical advice till he came here. The pulse was very weak, irregular, about 100. The face was very livid, and the dyspnœa very urgent. There was high toned sibilant breathing over all the chest, mixed behind with fine râles or fine crepitation; and dulness on percussion beneath both scapulæ. He was ordered—

> ℞ Antimonii pot.-tart. gr. 1-6; potassæ nitratis gr. x; ætheris chlorici ♏x; aquæ ℥j. M. Fiat haustus quartis horis sumendus.

The chest was enveloped in poultices. The next day the breath was easier; but still, considering the weakness and irregularity of pulse and his alcoholised constitution, he was ordered three ounces of gin daily. On the following day (the 18th), the pulse was stronger and less frequent, being 76. He perspired much, but was not nauseated by the antimony. To-day (the 19th), he is going on well, and will probably struggle through.

In all sorts of pneumonia, but especially in this broncho-pneumonia, the rigors are very strong, and mark distinctly the commencement of the disease. You can date its beginning more easily than other inflammations. I recited this last history to call your attention to the fact. Whenever you hear that a man has had such a severe rigor that he is knocked down suddenly when at work, like John D., or is woke up by it in bed, like Joseph C., you should always suspect pneumonia is coming.

About the other cases of broncho-pneumonia, I have no fresh remarks to make. One has a dilated heart; one albuminuria; and two, who came in moribund, seem to have been starved. Ailments of this severity in remote parts complicate the symptoms more than anatomical changes in the lung itself.

To recapitulate:

1. Certain atmospheric conditions cause inflammation of the lungs.
2. This is apt to be epidemic.
3. The inflammation appears to spread from the bronchial membrane to the pulmonary tissue; it is broncho pneumonia.
4. Those with chronic ailments are first attacked.
5. The inflammatory consolidation appears in scattered lobules, not in masses; and is therefore difficult to detect by percussion.
6. Broncho-pneumonia is not apt to be accompanied by pleurisy: hence the pulse is softer than in other forms.
7. The commencement of the disease may be dated from the first rigor.
8. The treatment of the disease may be active; blood-letting, antimony, and poultices, not being contraindicated by even the existence of old chronic ill-health.
9. An exception must, however, be made in the cases of those of irregular drinking habits.

Original Communications.

THE STRUCTURE AND GROWTH OF THE TISSUES:

A SHORT ACCOUNT OF THE CONCLUSIONS DERIVED FROM SOME NEW OBSERVATIONS WITH THE HIGHEST MAGNIFYING POWERS.

By LIONEL S. BEALE, M.B., F.R.S.,
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Under this head, I propose from time to time to give a short account of the general results derived from observations upon the structure and growth of tissues, and of some of the changes which take place in disease. Some of the researches on which the conclusions are based will be found in several papers in the *Archives of Medicine*, in a paper "On the Anatomy of the Liver", and one "On the Distribution of Nerves to Muscular Fibre", in the *Philosophical Transactions*, and in my work *On the Liver*. The subject will be discussed more in detail in a paper which will be published in No. vii of the *Archives of Medicine*.

I.—On the Structure of the Elementary Parts of Tissues.

It seems to me that the elementary parts (usually termed *cells*) of the tissues of every organism consist o matter in two essentially different states. In the firs condition (*nucleus* in some cases, *cell-contents* in others) each separate particle is actually undergoing, or is capable of undergoing, active and incessant changes determined by its own inherent powers, and moves in a definite direction from *within outwards*, or from *centre* to *circumference*. In the second state (*cell-wall*, *fibre*, etc.), distinct particles cannot be demonstrated. They appear to have coalesced, and are in a state of comparative rest. They have already passed through the active stages of their existence. They have acquired the properties for which they were formed: and, after fulfilling certain ends for a longer or shorter period of time, they will be removed to give place to their successors, which, in their turn, will pass through exactly similar phases of existence.

In the so-called cells of cuticle or of mucous membrane, for instance, the central part, which is ordinarily termed the *nucleus*, is granular, and is composed of the soft material above alluded to, in a state of active vitality. The outer hard portion, consisting of the so-called *cell-wall* and *cell-contents*, which in many cases pass by almost insensible gradations one into the other, is composed of matter which has already gone through the above state of active change, but is now quiescent. There are many other points with reference to the nature of *cell-contents*, which will be discussed subsequently.

Matter in the first or active state possesses the same general characters, to our imperfect powers of observation, in every living being, and in every part of each living being, in which it exists. It appears *granular* under moderately high powers of the microscope; but under the highest power that I have been able to obtain (1800 diameters*) the largest granules are most distinctly proved to be *spherules*, and many arguments founded on recent observations, which I shall adduce in other communications, have led me to the conclusion that this material in which all the wonderful actions characteristic of living bodies take place, consists of spherical particles, which are themselves composed of spherical particles, and so on, probably to a degree of minuteness far beyond that which we can possibly realise. Yet the chemical composition of every one of them must be most complex, and each must be the seat of chemical changes-, which, there is reason to believe, will never be effected except by the agency of such particles and their descendants.

The form of the mass composed of these spherical particles is determined by numerous complicated conditions. If free to grow in fluid, it is spherical or circular; but it may be oval or stellate, or it may assume other forms, according to the forces which operate upon it. Under favourable circumstances each mass grows—certain of its component particles increase—each of these reaches a certain size and divides—the whole attains a certain definite magnitude, and separates into two, and thus two masses of matter, the greater part of which is in an active state, while the remainder (nuclei and nucleoli in some cases) is capable of assuming it at a later period, are produced. Each of these little masses is invested on its exterior with a structure, the nature and mode of formation of which will be presently considered. Although it is impossible, in the present state of science, and probably will ever remain so, to point out characters which will enable us to distinguish the smallest particle of this granular matter taken from the body of a man, from a particle derived from one of the simplest living beings, it is obvious that these two particles differ very widely from each other in *power*.

A particle of one of the germs of a fungus, certainly less than the one hundred-thousandth of an inch in diameter (and probably particles infinitely smaller than this) is capable of propagating itself; and in the higher animals it is quite certain that very minute particles of some germs possess the same power; but others do not retain their vitality when removed from the part in which they were developed. Since it can be shown most conclusively, that a particle so minute is capable of carrying on an independent existence, and exhibits all thé phenomena characteristic of a living being, while no one has proved that an independent living particle much smaller than this does not exist; while, on the contrary, there are many arguments which almost compel me to believe in the existence of living organisms infinitely smaller,—it seems to me that no good purpose would be gained, in the present state of knowledge, by attempting to discuss what is the size of an *ultimate living* particle, or to assign at present an *arbitrary term* like that of *cells*, or any definite substitute for this, to what appears to us as the ultimate anatomical elements into which the textures of living beings can be resolved.

If, however, a portion of any living structure be carefully examined, it will be found to be composed of matter in two distinct states. The one, as I have already said, having in *all living beings* a granular appearance, being soft, exhibiting no definite structure when examined by ordinary magnifying powers, but made up of minute spherical particles, and having the most marvellous power of infinite increase;—the other, *differing* in different beings, and in *different tissues* of the same individual in the most extraordinary degree, in structure, in physical characters, chemical composition, and endowments. It never possesses the power of growing and multiplying. It may be changed by various circumstances, and destroyed and removed by the growth of other structures, but it is not changed by its own powers. The particles of matter in this state, of which every tissue is formed, have gone through a series of very active changes; they have passed through certain periods of existence, and have possessed the power of animating lifeless particles, but when they become tissue these stages are passed. The living matter has now passed through the last phase of its active state—the object of its existence is fulfilled; it no longer possesses active powers. In some cases it becomes converted into a substance dissolved in fluid, which is devoted to ulterior purposes in the economy, or is at once resolved into simpler chemical compounds. In other instances, it remains for a longer or shorter time as a tissue, having certain physical characters. When soft and yielding, the length of the period during which it preserves these properties depends, to a great extent, upon the composition of the fluid which bathes it. If this be modified, it may soon pass into decay. In other cases, the material is hard and unyielding, and may resist the action of the most destructive agents, and retain its characters unaltered for ages. It can be changed, but it does not change itself. It possesses no longer the inherent power of change, nor is it able to communicate its properties to other particles. White fibrous tissue cannot produce itself, nor can cartilage form cartilage, or the hard tissue of cuticle develop cuticle, but the *particles of soft granular matter*, forming little collections (termed nuclei in some cases, cells in others) in all these and other tissues, may increase in number and give rise to the formation of these tissues infinitely.

The relation of these two different forms of matter to each other is constant. The last is always *external* to the former. It is *formed* from it, and its properties depend upon the powers of the living particles which produced it. Of the outer *formed material*, the *oldest* portion is that which is most distant from the soft granular matter, and the *most recent* that which is nearest to it.

Matter in the first state is undergoing changes which cannot be explained by physical laws, and possesses powers which it has inherited from pre-existing matter which manifested the same powers. As it is concerned in the production of tissue, and as the germs of all embryonic and adult tissues are alike composed of it, I propose to call matter in this state of change, or capacity for change, *germinal matter*.

The *formed material* external to it is the result of changes occurring in the germinal matter by virtue of its inherent powers above referred to. The hard matter of horn, and hair, and cuticle, the fibrous tissue of tendon, the fibre of muscle and nerve, the so-called *cell-wall* of epithelium, and indeed in all cases the investment of the so-called *cell-contents*, be it hard or soft, were, at an earlier period of their existence, in the state of *germinal matter*.

[*To be continued.*]

REMARKS ON OBSTRUCTION OF THE BOWELS: WITH CASES.

By Edward Copeman, M.D., M.R.C.P., F.R.C.S., Physician to the Norfolk and Norwich Hospital.

[*Continued from page 36.*]

Case xvii. *Impaction: Recovery.* Mrs. W., aged about 30, of a weak and delicate constitution, was confined three weeks ago; labour rapid, child healthy. She suffered from obstinate constipation throughout her pregnancy; and since her labour has had trouble with the bowels acting irregularly, and stools lumpy, with nausea, faintness and general debility; but in other respects she has been doing well. This morning (Oct. 25th, 1852) I found her faint and suffering from tenesmus, having passed one lumpy motion and wanting to pass more. Pulse 100. Abdomen not swollen, but uneasy and tender on pressure. Several injections and doses of aperient medicine had been given since her confinement, and she always felt better after the bowels had been relieved. It was evident that something was impeding her recovery, and her surgeon was anxious to give her the benefit of a consultation. We prescribed turpentine fomentations to the abdomen, and a common enema: a draught of a drachm of spirits of turpentine, three drachms of castor oil, and half an ounce of peppermint water, was ordered to be taken immediately, and a little ammonia and lavender in water occasionally during the day.

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* The 1-26th of an inch, magnifying with the low eye-piece 1800 *diameters*, made by Messrs. Powell and Lealand.

9 p.m. After she had had two fomentations and two turpentine draughts, we found the bowels had acted freely twice. Pulse 80, less faint, abdomen less tender. She has taken some beef-tea, and is altogether better.

Oct. 26th. She had another relief in the night, and slept at intervals. Abdomen flaccid and scarcely at all tender; but she still complains of uneasiness in the rectum as if there was something more to come away, and I advised another turpentine draught. Pulse 70. Tongue furred; inclined to be sick. I ordered a mixture containing aromatic spirits of ammonia, tincture of calumba, and camphor mixture.

9 p.m. The bowels acted three times, after which she seemed very comfortable, and remained so till four in the afternoon, when she again had painful sensations in the rectum, with tenesmus; causing her to make several attempts at stool, with no other result than the expulsion of a little watery mucus; apparently indicating that at last the bowels had been fully emptied, and that irritation of the mucous membrane was now the sole cause of her uneasy sensations. At about 7 o'clock, she had a slight feverish attack, probably from the frequent disturbance; for at nine she was quiet, with a pulse at 84, and a moist tongue. There was no tenderness in the abdomen; she was less faint, and complained of little besides uneasiness in the rectum. She was ordered a starch and opium enema, and a dose of chalk mixture and laudanum after each motion should there be any purging: also a pledget of flannel sprinkled with tincture of opium, to be applied to the epigastrium.

Oct. 27th. Bowels not moved; but she had not a comfortable night. Abdomen still uneasy, but not so much tenesmus. Passed a large quantity of urine, and the bladder is rather irritable, perhaps from the turpentine. Complains of being very weak. Body not tender nor tympanitic. Pulse under 70 when quiet, but is easily quickened by talking or moving. Tongue furred. Complains of faintness and nausea. Diet to consist of broth and milk: to take a grain of quinine three times a day. Poppy fomentation to the abdomen.

Oct. 28th. No further relief from the bowels. Still complains of a feeling of fulness in the rectum, but is better than yesterday. Abdomen flaccid and not tender. Pulse 72. Slept much more comfortably. Tongue cleaning. Slight reappearance of lochia yesterday, of a healthy character.

In the middle of the day, she had a return of distress in the rectum and bladder, accompanied with hysteria; and I thought it right to examine both the uterus and the rectum. The former I found perfectly healthy and right as to position; but the rectum was extremely capacious and flabby, and, plastered upon its posterior wall, corresponding with the hollow of the sacrum, was a large mass of lumpy fæcal matter, the cause, no doubt, of the uneasy feelings. This I broke up as well as I could with the finger, and then injected a pint of warm water, with directions to retain it as long as possible. On our visit in the evening this had not passed away; but there was much less uneasiness, and the patient's mind was considerably relieved of apprehension by the assurance we were enabled to give that the cause of her illness was of a much more simple nature than was previously imagined.

Oct. 29th. No motion yet, the injection not having come away. Pulse quiet, tongue cleaner. I ordered rhubarb and tartrate of potash in a draught to be taken immediately, and repeated in six hours, if necessary.

Oct. 30th. Two of the draughts not having operated when Mr. — visited her last evening, he gave another injection; and she had several motions in the night, the first being composed of several large lumps, part of what had been felt and broken up in the rectum. No nausea; tongue cleaner. Pulse 76. The quina was continued.

Oct. 31st. She had again some irritation in the rectum, for which she took a dose of castor oil, which operated several times and occasioned faintness. She had an opiate at night.

Nov. 1st. Better again this morning; but still complains of soreness in the body, and some tenesmus. Took a compound chalk draught.

Nov. 2nd. Better; but she says she is sure there is something yet in the rectum to come away, but which she is unable to expel. On examinining the rectum again, I found several large, hard lumps of fæces, some of them enveloped in folds of the loose capacious rectum. A large enema was administered, and, soon after, a considerable quantity of fæcal matter was expelled.

Nov. 5th. She has each day since last report had several lumpy evacuations from injections, and is much better. She takes a dinner pill of aloes and rhubarb daily, and goes on with the tonic.

Nov. 18th. She has been going on well, with the exception of occasional uneasiness from accumulation in the rectum, to which there is a very remarkable tendency. The quantity of hard fæces that has passed during her illness is almost incredible.

By persevering with the treatment, the patient gradually recovered, and has remained well up to the present time.

This case at one time excited a good deal of apprehension lest some latent puerperal mischief was about to manifest itself; and this probably might have been the case had not the bowels been satisfactorily unloaded. When the bowels had been apparently well relieved, and nevertheless, the tenesmus kept recurring, it was supposed the rectum might have been irritated by the turpentine; but the sole cause of the difficulty was the enormous impaction of the bowels by hard lumpy matter, which seemed almost endless in quantity, and was probably the accumulation of a considerable portion of her term of pregnancy, during the whole of which she had the greatest difficulty in procuring any satisfactory evacuations.

Case xviii. *Constipation: Recovery.* Mr. —, aged about 60, began three days ago to feel pain in the body, which gradually increased. I visited him on the 26th of March, 1857, and found the body very tender, principally in the epigastric region. Pulse quiet. No fever. Tongue inclined to be dry. Bowels had been very much confined; abdomen tense and tumid, and colon distended with air. Stomach irritable and disposed to reject its contents. I ordered a powder containing three grains of calomel, three grains of compound antimonial powder, and five grains of Dover's powder, at bed-time; turpentine and laudanum stupes to the abdomen; and a dose of compound infusion of senna and compound decoction of aloes, every four hours.

March 27th. He vomited the second dose of the mixture and could take no more. No relief from the bowels; pain continuing, but not so severe. Complains of confusion of thought. Tongue dry. Urine high-coloured. He was ordered to continue the fomentations, and to have a grain of calomel, and a quarter of a grain of opium every four hours; a draught of potass with rhubarb; and a common enema.

8 p.m. Two injections have been given since the morning, and both returned without fæcal matter. There is less nausea, but the abdomen is very uneasy. The remedies were continued.

March 28th. Passed a more comfortable night, sleeping at intervals. Had a small watery motion this morning. Pulse quiet. Pain and tenderness less, tongue not so dry, but complains of great depression. Three grains of compound extract of colocynth, with extract of henbane, were taken immediately, and compound senna mixture with aromatic spirits of ammonia to be taken every four hours until the bowels are relieved.

March 29th. Bowels copiously relieved of semi-solid fæces several times to-day, followed by entire removal of pain, and amendment in every respect.

Nothing further occurred to prevent recovery or to require especial notice, although he must have had a very narrow escape from peritoneal or enteric inflammation.

Case xix. *Obstinate Constipation: Recovery.* May 29th, 1853. Miss —, aged 18 years, had been a week under treatment for obstinate constipation, first by calomel and purgatives, and afterwards by enemata and opiates. The bowels had long been constipated, sometimes not being relieved for many days together; and for a week past there had been complete obstruction. A small quantity of lumpy, offensive matter had been removed from the rectum by the injections, but there is hardness and tenderness to the right of the navel, and I thought I could feel fæces in the *caput coli*. She had neither heat of skin nor anxiety of countenance; but frequently vomited and had a pulse about 96. Tongue but little furred. No peritonitis. We injected three pints of soap and water, but it brought away scarcely anything coloured; and afterwards a little gruel a drachm of laudanum in it to procure a quiet night. The abdomen was ordered to be rubbed with camphor liniment and laudanum.

May 30th. She had a quiet night, but no motion: took coffee and milk two or three times, and has not been sick. Enema to be repeated with the addition of two ounces of castor oil, and she was ordered to take a colocynth and henbane pill at bed-time.

7 p.m. No vomiting during the day, and she has a cheerful countenance. She says the liniment eases the body. The enema returned the colour of pea-soup, with a strong fæcal smell, but no scybala. Pulse 90. The enema of soap with castor oil was ordered to be repeated, and afterwards the opiate enema. Has several times during the day complained of soreness in the throat, with a feeling as if something having a very disagreeable smell wanted to come up.

May 31st. She vomited once soon after the enema last night, but not since. The injection came away more coloured, and was very offensive. She is troubled much by piles, which disturbed her night. Pulse quiet; countenance cheerful; abdomen easier, but still hard; and she says she is convinced she cannot get well unless something more is removed. She was ordered to take the colocynth and henbane pill night and morning, and to repeat the enema. She takes coffee and milk, and likes it.

June 1st. She was sick once again after the enema last night, but is very quiet this morning, with a good pulse at 84. More fæcal matter, but no lumps, passed with the injection.

June 2nd. A very good night, and no sickness. Pulse 72. Abdomen more supple; but I can still feel fæces in the colon. The injection given last night came away deeply coloured and very offensive, and in it were several pieces of undigested rhubarb in which she had taken her pills for the last day or two—cooked rhubarb out of a tart; proving the intestinal canal to be pervious. The enema was repeated; a grain of blue pill was added to her pill at night. A drachm of laudanum in a little gruel has been injected into the rectum every night.

June 3rd. Countenance cheerful. She took some mutton broth yesterday. Tongue red, clean, and inclined to be sore. Had three motions after the enema, containing recent relaxed fæces and portions of broken up scybala. Had an egg this morning, and no return of sickness. Still some uneasiness in the abdomen, and evidence of partial impaction of the colon. The enema and pill were repeated.

June 4th. She has had plentiful evacuations of liquid fæcal matter, with a few lumps of good colour, and some *débris* of dark longer-retained substance. Feels languid, but abdomen is much easier. I advised an entire respite from treatment to-day.

June 5th. Much the same. The pill and enema were repeated.

June 6th. She had a good motion last night, and a solid one to-day, without an injection. There is still a small spot near the navel, which is tender, and to which I ordered turpentine liniment to be applied. She was ordered to take the pill each night, and have the enema the following morning.

June 14th. On visiting her to-day, I found her sitting up, and complaining of nothing beyond weakness. She had had daily copious relief from the bowels; the abdomen was entirely free from tenderness or enlargement; no swelling could now be felt in the spot where it had been so persistent; and there was nothing to prevent perfect recovery.

About a year after the last report, she married, and is at the present time, I believe, in good health.

Case xx. *Constipation: Severe Vomiting: Recovery.* Mr. D. was attacked on Sunday, March 5th, 1854, with vomiting, after eating some new plum-cake, and taking several glasses of inferior port wine. His bowels had been very costive for some time, seldom acting more than once in two or three days, and then but scantily. Up to Thursday, March 9th, he has had no relief and the vomiting was frequent and distressing. He had been treated with various purgatives, calomel and opium, croton oil, and enemata, but without any effect until this (Thursday) evening, when, after a large gruel injection, a good deal of scybalous fæcal matter came away, without, however, relieving the sickness, which was severe and accompanied with hiccough. His pulse had all the time been quiet, and was about 80. The tongue was covered with a yellowish white fur. No fever. The abdomen was tumid, and but little resonant on percussion, but there was no tenderness or pressure; no peritonitis; no tumour in either groin. The greatest resistance appeared to be in the middle of the transverse colon. The matters vomited were dark and flocculent, containing bits of orange, currants, etc., which had been taken some time before. Countenance anxious; he complained of exhaustion, and of heat about the throat, from the frequent vomiting, with thirst. Hitherto, there had been some difficulty in passing the tube up the bowel; but, on now giving another injection of gruel, turpentine, and castor oil, a long stomach-pump tube was passed almost its whole length with ease. I waited to see whether this injection would bring away any more scybala, but a portion only of it returned, and that not coloured with fæces. I then advised a dose of laudanum and ammonia, to be repeated if restless; a turpentine stupe to the abdomen, and another turpentine and oil enema early in the morning. I believed the sickness depended upon impaction of the bowels, and was disappointed at its persistence after the passage of so many scybala; but it was somewhat relieved before I left; and as there were no indications of inflammatory mischief, I hoped he might do well, particularly as some impression had been made upon the mass apparently collected in the bowels.

On the following day, his surgeon wrote as follows: "The last injection remained until this morning, and was then evacuated with a large quantity of fæculent matter. The patient is therefore tolerably comfortable."

March 11th. To-day I heard that the sickness and hiccough gradually subsided yesterday; that the bowels had acted very freely; and that the patient was considered out of all danger.

Case xxi. *Constipation: Peritonitis: Recovery.* On August 29th, 1854, I was called some distance into the country to visit a gentleman, about 40 years of age, who had been suffering from intestinal obstruction for several days, and now had peritoneal inflammation. I found the abdomen very tender, especially about the umbilicus; the pulse sharp and rapid; the tongue furred; the countenance anxious; the skin relaxed; and vomiting frequent. I prescribed calomel and opium, of each a quarter of a grain, every four hours; a large blister to the abdomen; and a full injection of gruel, turpentine, and castor oil; milk and lime-water as a drink.

On the following day I was informed that the injection was followed by a very copious relief from the bowels, consisting of both fluid and solid fæces; for a day or two afterwards the bowels discharged a very considerable quantity of fæcal matter, and he was soon reported convalescent.

Case xxii. *Impaction: Abdominal Pain, Hiccough, and Vomiting: Recovery.* Mr. —, aged 67, was seized at 2 A.M., October 2nd, 1854, suddenly with pain in the left iliac region, of a sharp cutting character; it soon became fixed, and was accompanied with a feeling that he should get ease if he could get relief from the bowels. I saw him at 3.30, when he had just been sick after drinking some tea; he was sick again whilst I was with him, but his pulse was quite natural and he had no fever. I ordered him two grains of calomel, to be followed by a rhubarb and potash draught; and twelve leeches to the painful part; turpentine fomentations to the abdomen; a turpentine enema; and a pill with calomel and opium, of each a grain and a quarter, every four hours. At 10 in the morning I found him still in great pain, and there had been no relief from the bowels. Pulse quiet; abdomen distended, but not very tender on pressure. The pill and draught were repeated.

2 P.M. Pain still constant, but not so severe. He slept at intervals, and has not been sick again; but has had no relief from the bowels.

October 3rd. He has been sick again to-day; the pain continues; and he is more troubled with hiccough. No fever. No relief from the bowels. The calomel and opium pills were continued, and an oleaginous enema was given.

October 4th. He had three bilious motions to-day after a large injection in the morning. The pain is less severe at its original seat, but is now more diffused over the abdomen. I ordered the abdomen to be covered with a hot bran poultice. The calomel and opium pills were continued.

October 5th. He was feverish last night, with a pulse at 96. Tongue furred; he slept heavily at intervals. Hiccough troublesome, but relieved by chloric ether. He had another injection this morning, followed by a large pulpy evacuation. Pulse now 84. He was ordered to take a pill with four grains of scammony; and a dose of fever-mixture every four hours.

October 6th. He took another scammony pill this morning, but had no motion until after an enema. Pulse 80. Tongue cleaner; abdomen still tender, and the pain in the left iliac region continues, striking into the hip. A turpentine fomentation was ordered.

Oct. 7th. He had a good deal of pain in the night; but I found him much easier this morning after having had an evacuation, consisting of old broken-up fæcal matter. Pulse 72. Tongue cleaner. As the abdomen was still tender, I ordered the calomel and opium pills to be continued with the fever mixture when in pain or restless.

October 8th. He had another large relief to-day, and was better.

October 16th. Since last report there have been two or three evacuations daily, and but little has been done in the way of medical treatment beyond giving an enema of gruel and castor oil, and applying an opiate liniment externally when required. The evacuations from the bowels have been plentiful and bulky, affording strong evidence of considerable previous accumulation. Some tenderness in the situation of the sigmoid flexure of the colon remained until a day or two ago; but he is now able to sit up nearly all day, his appetite is improving, his pulse steady and quiet; and he looks far better than might be expected after so severe and painful an attack.

November, 1860. This gentleman is still alive and well, and has never had any serious return of his complaint, although the bowels have been occasionally irregular in their action, and rather difficult to keep in order.

Case xxiii. *Constipation: Recovery.* Mr. —, a retired farmer, very corpulent and fat, consulted me on May 17th, 1856, in consequence of pain in the abdomen and obstinate constipation. The tongue was covered with a dark fur; pulse feeble; and respiration hurried and difficult. He had been under treatment several days, and had taken a variety of purgative medicines without effect. I ordered him a pill daily, containing watery extract of aloes and rhubarb; and a mixture consisting of carbonate of potash and infusion of gentian. In a few days he had several very copious motions, and soon got well.

Case xxiv. *Impaction: Recovery.* May 23rd, 1856, I was summoned to Mrs. T., aged 33. She had suffered from a blow on the abdomen a few weeks ago, followed by pain and obstinate constipation, for which she had been carefully treated. She now had a swelling above the right groin, tender and painful, somewhat resonant, and when handling it I could feel air disengaged. There was also a swelling to be felt at the upper part of the vagina, and she was supposed to be labouring under uterine disease. I could not, however, discover any, and looked upon the case as one either of intestinal impaction to a considerable amount, or of fæcal abscess. We prescribed watery extract of aloes with extract of rhubarb (of each two grains) daily, and Griffith's mixture to support her strength; for she was extremely exhausted and feeble. A few days afterwards I was informed that her bowels had been very plentifully relieved, and that the tumour was almost gone. She slowly recovered, and resumed her usual household duties.

Case xxv. *Abdominal pain: Vomiting: Constipation: Recovery.* May 20th, 1856, Mr. —, aged about 50, was suddenly attacked after tea, with severe pain in the epigastrium, followed by vomiting, having been previously quite well. He had eaten eggs for breakfast, and thought he did not digest them well, but seemed as well as usual during the day. At tea he ate a few radishes, and the attack came on about an hour afterwards. I was summoned about midnight, when I found him in great pain, writhing about in bed, vomiting every now and then with abdomen distended with air, borborygmus to a great extent; but neither headache, heat of skin, furred tongue, nor hurried pulse. I ordered turpentine and mustard to the seat of pain, and gave two doses of laudanum and castor oil, half a drachm of the former and half an ounce of the latter for a dose. These kept down, and I left him easier at 1.30 A.M., having given him twenty drops more laudanum in a little brandy and water. He was also directed to apply twelve leeches to the abdomen in the morning should the pain continue or return.

May 21st, 10 A.M. He had the leeches applied about an hour ago, as the pain, though lessened, had not ceased. The bowels had been costive for several days, and were not now relieved. No more vomiting. Pulse 72. He feels feverish and complains a little of headache. The leech bites bleed freely. He was ordered to foment the body so as to encourage the bleeding, and to take a seidlitz powder.

May 22nd. He had relief from the bowels yesterday, with decided relief to the pain; but there is still a good deal of fulness of the abdomen, and a feeling of distension causing him to fear a return of pain. I ordered another dose of castor oil and laudanum, and a pill containing a grain of aqueous extract of aloes, every four hours; and the fomentation to be continued.

May 24th. Since last report there have been plentiful evacuations from the bowels, consisting of large quantities of lumpy fæcal matter. There is now scarcely any abdominal pain and much less distension. He has not been again sick, but feels exhausted and unwilling to be disturbed. He was ordered to continue the pill twice in the day.

The result of this treatment was that the bowels continued to dislodge their contents; the uneasiness and tension of the abdomen ceased, appetite returned, and the patient speedily recovered.

[*To be continued.*]

THE HOT-AIR BATH.

By B. W. Richardson, M.A., M.D.*

We must be unanimous, I think, in feeling that the subject brought before us to-night is one not only of professional, but of national interest. We must, too, be unanimous in accepting that the subject admits only of true scientific discussion in a society such as ours, where physiological and practical medical labours so happily and unitedly blend; and lastly, we must agree in the expression that no one could have brought up the question with more acumen and ability than Dr. Thudichum; for, though we have to diverge from him when he trims his subject to too fine a point, and insists with excess of feeling on his own arguments, nevertheless we are bound to admire his shrewd talent and the eloquence and brilliancy with which, like a Prince Rupert in medical campaigning, he takes his positions and deploys his energetic artillery.

The subject which has been brought before us to-night, stripped of all the verbiage with which it is surrounded to make it a mere commercial speculation, embraces nothing more nor less than the question, What influence has heated air on the animal body, when applied through the medium of the respiratory and cuticular tracts? and how far does this influence extend, physiologically, therapeutically, and socially? In such remarks as I have to make, I shall consider the subject under these divisions.

Physiologically, I do not think Dr. Thudichum has done justice to previous inquirers. Long before the Turkish bath engaged attention, I had, for one, followed Fordyce and some of the older inquirers as to the effect of heat on animal life, and had even discussed these points in the Medical Society; and since these baths have been established, I have repursued certain of these labours, and added to them, following up the inquiry in my own experimental way, as a purely experimental pursuit. Thus I have placed various animals in differing temperatures, and at various determinate degrees have sought to learn with precision how long life can be sustained at different degrees of heat, and what differences exist in the products of excretion during the living period.

Without troubling the Society with details, I may state that the effects of an increased temperature on the body, say above the standard of 60° Fahr., are due to the simple fact that what is commonly called the process of oxygenation, but which would be better called the process of calorification, is abnormally increased. For example, if an animal be placed in a closed chamber of such dimensions that the animal will die in two hours at a temperature of 60°, it will be found that another animal of the same kind, placed in another chamber of the same size, will die in a quarter of an hour at a temperature of 120°; and so on in a steadily acting law, which perfect experiment would speedily reduce to absolute formulæ. When, again, we turn to the cause of the death under the circumstances named, we find that it is the same in both cases; we find, *i. e.*, that the cause is a consumption, by the animal, of the oxygen contained in the jar; and that the products of the consumption are the same, in the way of water and carbonic acid. There are, however, limitations to this rule; there are degrees of heat at which, on sudden exposure, death takes place as by an electrical shock, and where no time is given for chemical products; but, within such limits as those which should be supplied in a common hot-air bath, the rule holds good. Again, I find that the exposure of an animal to a high temperature produces other effects characteristic of a rapid oxidation. It makes the vascular parts unduly red; it increases the external or surface heat; it relaxes muscular fibre to such an extent, if it is pushed far enough, that contraction fails utterly; it renders the circulation quicker, with a steadily diminishing power; and it renders venous and arterial blood the same in colour. Again, owing to this rapidity of the chemical life, heat modifies materially the action of many poisons which produce their effects solely by the power they possess, at ordinary temperatures, of stopping the oxidation or calorific process: thus, the effects of the volatile narcotics, Dr. Snow once pointed out to the Society, are moderated by degrees of temperature; and thus such poisons as can only be eliminated from the body either by metamorphosis or rapid direct elimination, are rendered severally poisonous, or less poisonous, in the same doses, at different points of the thermometer.

In regard to the cases to which heat may be applied in the treatment of disease, I believe that in this direction we may, by a discriminating policy, turn our knowledge to a grand account; but we must not be led away by the statements of enthusiasts, who, believing the remedy to be one for all diseases, would push it to any extent. Judging the remedy by its extreme physiological effects, we may pronounce, almost *à priori*, where it will be useful: that it should be useful in cases where there is in the tissues or in the blood a poisonous substance, which being soluble admits of elimination in water, or being volatile admits of elimination as gas, or being oxydisable admits of destruction by metamorphosis. Under these positions we may accept and group many forms of disease. Some zymotic diseases might be brought under treatment; as, for example, scarlet fever, which is always less fatal, and, as I believe, less prevalent in summer; and typhus, which, as Dr. Goolden observes very shrewdly, is unknown in tropical heat.

Here, again, may be classed various of the diathetic disorders, in which the prevailing cause of mischief is a product generated in the body itself, which product is eliminable by a copious sweating process; and here, also, we might include the symptoms produced by many direct poisons, such as opium and strychnia.

Practically, in my own hands, I have seen benefit follow the use of heated air. I have known, for example, a hot-air bath improvised in cases of scarlatina, and I believe that in all the cases where sweating was produced good was done; but this is by no means a new remedy in this country.

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* This paper consists of some remarks made by Dr. Richardson at the last meeting of the Medical Society of London, when the subject of the Turkish or Heated Air-Bath was brought forward by Dr. Thudichum. We give Dr. Richardson's observations in full; as, while they are not absolutely in opposition to the use of the bath, they contain some wholesome cautions. Editor.

Since Turkish baths have been erected, I have sent to them cases of every kind that were likely, in my opinion, to be relieved by diaphoresis: and, in the main, the results have been good. I think I saw one case of eczema, I may say cured by the bath; symptoms of neuralgia and gout are obviously often relieved by it; and there have been one or two cases of dyspepsia in which, I think, at least temporary benefit has occurred. But, as a set off against these benefits, there have been examples where either no good or some injury has followed.

A gentleman with an irregular pulse, who took a bath on his own account, came to me afterwards agitated and in much pain; his head being the seat of the pain, and the pain itself being attended with throbbing and a sensation of fulness. I heard the same symptoms complained of by a healthy man, who took the bath as an experiment. These cases are certainly not very alarming; but they show, at least, that the heated air is not to be used indiscriminately, as a mere bath-man or director of an establishment shall direct.

I think, too, that great care should be taken in every case not to carry the heat too high. I know the body will bear intense heat for a brief time; but, as a general practice, I should opine that 130° Fahr. should be the extreme limit, and that 130° would answer all practical purposes.

From the use of the heated air bath as a therapeutical agent to its use as a social enjoyment or luxury, is a wide step, and a step which I, for one, hold back from taking. It seems to be the misfortune of this remedy, that its administration is for a time attended by a sensation of great pleasure and satisfaction. This is not a peculiar feature of the heated air bath. In the palmy days of blood-letting, when every one was periodically bled, the argument in favour of the practice was, that it produced for a time a lightness and agreeable feeling. I absolutely knew a man, who for years had been cupped once a month regularly, for no other reason than that the operation was followed by sensations of lightness and ease. Persons who are recovering from a long and depressing illness, or who take purgatives, experience the same agreeable feeling. In the respiration of nitrous oxide gas, and even in a certain stage of opium-narcotism, the same mental liberty is experienced. But what is the meaning of this sensation? Is it one of power? I believe not. I believe it is simply a transitional decline, either from a state of artificial exaltation to the natural life, or of decline from the natural life to a condition below it—conditions of unconsciousness and temporary or absolute oblivion; even in the passage to death itself, there is a transitional stage of pleasure, if physical local pain be not present to interfere. I take it, then, that this luxurious state, as extorted by the heated air bath, is one of depression; a state, perchance, valuable in disease, and in health harmless as a mere experiment, but ruinous when driven into an intemperate and constant habit.

I deny that this bath can ever take the place of exercise, or in any way supplant exercise. I urge that in all cases the time required for the bath in healthy men were better spent in digging, walking, rowing, the cricket field, the skittle-ground, or the rifle drill; and I regret to see even an attempt to introduce this luxury as a substitute for these occupations. I look back into history, and I am more fully preserved in this belief. *Turkish* and *Roman* are words of evil omen. I recall the histories of Turkey and Rome. I recall that in the periods of the rise of these nations a ruler lived in a cottage and tilled the ground, or a caliph clothed himself in an undressed skin, and washed not once a week. I recall that when these nations reached their glory they were more civilised, but yet not luxurious; and, lastly, I recall that when these great nations collapsed, and were beaten by inferior tribes, luxurious tastes had crept in and destroyed them, whereof this bath was the most prominent and enticing of all.

I predict that it will be the same here under the same principles. I predict that, whenever Englishmen give up the active occupations I have named, and in slippered pantaloon luxuriate daily in a bath to rid themselves of the products of exertion, then this country will have passed the zenith; then there will be no great hero to bid every man do his duty, no man to do the duty, and no England for which the duty should be done.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

COMMENTARY ON A RARE CASE OF DISEASED LIVER.

By S. Martyn, M.D., M.R.C.P.

(Read at Bath, Nov. 29, 1860.)

I have ventured to occupy your attention for a short time this evening with a single case of diseased liver, chiefly for the following two reasons. Firstly—This kind of disease, although the instance before us is by no means the only case on record, has never yet been thoroughly investigated. Secondly—However rare the entire combination of pathological conditions, with their accompanying symptoms, may have been, still, in some form or stage, the disease may at any moment come before us. That it does sometimes appear under fragmentary and difficult forms, and when, if detected, it would be open to treatment, appears to me quite certain. The condensed record of this case is as follows.

J. P., aged 38, a bankruptcy court messenger, was admitted into Thomas Ward, Bristol General Hospital, under my care, on November 7th, 1859. He is a small, nervo-choleric man, who once enjoyed very robust health. For some years his habits of life have been as irregular as possible. He has lived habitually with loose women, and been an incorrigible brandy-drinker. He had syphilis, as is ascertained from his father-in-law and an intimate friend, but it is six or more years ago. Three years since he was an in-patient of the Bath United Hospital, with "rheumatism." He had swelled joints and chest symptoms; and was in six weeks discharged, but has never been well since, always suffering from pain in the chest or sore throat. The opinion of his friends is that this attack arose from the "bad disorder" lying about him. For three months past he has observed swelling about the bowels, especially after meals, and this became steadily worse till seven weeks ago. He then consulted Dr. Herapath, who made out liver-disease, prescribed accordingly, and ultimately tapped him, evacuating nine quarts of fluid. At present his general state is one of discomfort from distention, but without pain. The skin is rather dry; over the chest it is mottled and brown. Decubitus is horizontal. His face is very thin, but healthy in colour; his lips are bright red, and the conjunctivæ very pearly and white. His voice is good; breathing tranquil; he has no cough. The sounds of the lungs and heart are normal. Pulse 100, regular. Tongue white, and bowels confined. The abdomen is very tense, presenting everywhere the transmitted wave from the slightest tap. The surface veins are enlarged. His legs have swollen this week. The urine is not scanty nor albuminous, but loaded with lithates. The stools are natural in colour. He was ordered good diet with porter; bark; nitric ether; colocynth pills.

Nov. 17th. Having increased so as to measure at the umbilicus 3 feet 6 inches, and complaining much, he was tapped for me by Mr. Clarke. The quantity of fluid was thirty imperial pints. It was of specific gravity 1016; highly albuminous and alkaline, soon depositing a cloud of spheroidal epithelium and blood-cells. I introduced the bulb of a thermometer into the abdominal cavity, and it read 99·8. He was ordered bark, iodide of potassium, and aperients.

Nov. 21. He feels very comfortable. The circumference at the umbilicus is 36 inches. The liver does not extend below the cartilages of the ribs; its upper deep boundary being the fourth costal cartilage, and its surface smooth. His nose has bled freely, a frequent occurrence of late. The legs are not swollen. Pulse 108. Urine clearer, and its quantity greater.

Dec. 1. The abdomen is filling again; over the gall-bladder there is slight tenderness on firm and deep pressure. Iodine pigment was ordered.

Jan. 2, 1860. He is not suffering, although the distention is again up to 47½ inches; pulse 120.

Jan. 4. He has for two nights had severe attacks of dyspnœa. Last night he appeared dying, and a rigor was observed.

Jan. 5. His face is haggard, and purplish white; the pupils are dilated; the scrotum and legs are enormous; his circumference is 49 inches; respiration 36; pulse 120, thready. He was tapped at four o'clock, nearly as much fluid as before being evacuated. While the fluid flowed, the pulse became stronger, remaining 120. The fluid was alkaline; its temperature as it flowed 101°; specific gravity 1014; very albuminous.

Jan. 6. He was sinking all day, and vomited yellow bile. He died at 4.30 p.m.

Post-Mortem Examination. The organs were generally healthy, except the liver and peritoneum; the latter showing traces of inflammation of slight and recent character. The liver was somewhat large, its surface being marked by a few depressed lines, and covered with recent lymph. On section its lobules appeared either healthy and their cells not overloaded with fatty granules, or else obscured by purple congestion. The gall-bladder was empty. At the centre of the liver, there was the following state of things near the transverse fissure, which was occupied around its vessels, etc., by a hard fibrous mass. On section here the knife encountered scirrhous portions, evidently composed of liver-tissue altered by a new and fibrous ingredient. Hence the pale red substance was close in texture, very elastic, and hard, while vessels passing through it were obliterated in the transit, and pervious further on. In the centre of the hardest parts the knife passed through white or very faintly yellowish masses of softer matter, the sections of which, to the number of three or four, varied up to an inch and a half in diameter. These whitish masses were surrounded by delicate zones of redness, and situated in these incomplete cysts. Irregular in shape, they might be turned out of their hollows by tearing some adhesions; when it appeared that they were in the tracks of portal canals, though, having burst them up, they excavated the liver-tissue itself. Through one of these white masses an occluded portal vein ran; but some large portal trunks remained patent. The interiors of the emptied hollows were mottled with yellow matter. A probe would not pass up the cystic duct from the empty gall-bladder. The material of the yellowish white masses was quite homogeneous, very elastic, and tore like white of egg boiled very hard. A microscopic section, from wherever taken, showed the following elements: 1. A granular base not influenced by ether; 2. Refracting granules soluble in ether; 3. Wrinkled spheroidal cells, averaging 1-3000 inch in diameter, and possessing, when acted on by acetic acid, very much the character of pus-cells; 4. Small plates of cholesterine; 5. Minute granular masses of orange-coloured biliary matter; 6. Masses of radiating acicular crystals; 7. Some columnar epithelium. Alcohol, in which a piece had been boiled, soon deposited cholesterine, and, when evaporated to dryness, concentric scales resembling leucine. Nitric acid applied to a slice indicated protein and bile-compounds, producing also some effervescence. The star-shaped bodies were composed of tyrosin, as far as I could determine, the quantity present sufficing for microscopic analysis only. Insoluble in ether, and almost so in alcohol, they were readily taken up by mineral acids, and destroyed by heat. On boiling pieces of the white substance in water, filtering and concentrating, there were deposited beautiful stars of crystalline needles possessing most of the characters of tyrosin. The pale red condensed liver-tissue around the white masses proved a fine example of abnormal development of connective tissue. It was crowded with large oval nuclei; and, at the torn edge of the preparation, each was seen to belong to a fusiform fibre-cell with dividing extremities.

Remarks. The cause of death in this person was evidently an obstruction to the portal circulation occasioned by the diseased tissue in and around the transverse fissure of the liver. The morbid appearances were due doubtless to a previous state of inflammation; for the thickened areolar tissue in the transverse fissure, the condensed tissue of the liver itself in the neighbourhood, and the hard cicatrix-like metamorphosis of parts near the white masses, all point to an inflammatory condition. The white imperfectly encysted masses must have arisen out of this process; for the cells in them could have come only from the epithelium lining the biliary ducts, and thrown off, after the manner of pus-cells from any irritated mucous surface. The white masses are pervaded by elements of bile, which must therefore have been freely mixed with the cells in the dilating ducts while the whole was semifluid. That certain ducts should have become dilated in this way is to be attributed to their occlusion by fibrous constricting tissue. Other ducts, remaining unaffected, conveyed the bile from the rest of the liver, so that its function, *quoad* the bile was not appreciably impaired.

The pathological sequence would probably be as follows: 1, irritating matter present in the portal trunks; 2, irritation set up in their neighbourhood, ending in rapid cell growth of the connective tissue, and its condensation; 3, irritation of the ducts involved, and cell-growth in them, with admixture of bile; (that mere occlusion of ducts will not produce this effect is proved by cases recorded by Bright and Frerichs); 4, solidification of this semifluid mass, now cut off below by a fibrous structure; 5, gradual constriction of portal canals and veins by cicatrix-like contraction, occasioning venous congestion, dropsy, deprivation of nutritive matter, and death.

Such a chain of processes has not been hitherto described, as far as I know; but a similar state of the liver has repeatedly occurred to the morbid anatomist. The truth is that this species of inflammation is mostly scattered here and there, limited in extent, and does not therefore produce a fatal result of itself.

Various names have been applied to this diseased condition of the liver. No doubt from the similarity of the whitish masses to those of cancer, the anatomical diagnosis has mostly been in that direction. They were thus classed by Dr. Farre. Dr. Bright, in vol. i of the *Guy's Hospital Reports*, describes masses of this kind as "malignant." Abercrombie called them "tubera of the liver;" Foucart, "tubercles;" Bochdalek, "retrograde cancer." Others, more correctly, have considered them as "obsolete abscesses." Dr. George Budd called them "encysted knotty tumours," and gave a description of their structure and origin with which my own view of this case nearly accords. Dr. Budd had seen two cases, and examined tumours from three others. He pointed out their inflammatory origin, and that they contained the accumulated secretion of the ducts. It is to Dittrich, however, that we owe an inference, from numerous cases, that the true cause of the whole disease is the syphilitic poison. That the liver was sometimes affected by syphilis had been guessed rather than proved before his researches, and though his theory had been opposed by Böhmer, its strong probability remains unshaken, at least such is the opinion of Bamberger. In one point I differ quite decidedly from Dittrich; for he regards both the scirrhous matter outside and the whitish mass within as "exudations," differing simply in their plasticity. Now, without going further into the cellular pathology of the subject, I think it quite demonstrable that both these structures are abnormal growths of the elements which were there beforehand; connective or fibrous outside, epithelial within.

Our case is especially distinguished by the restriction of disease to the neighbourhood of the portal fissure, this producing ascites, a result seen in slight degree by Bamberger, and which Dittrich states might be expected.

If the question be asked why the syphilitic poison should now and then attack the liver, I should be inclined to venture on the supposition, founded however only on some of the recorded cases (including the two of Dr. Budd's and this one) that spirit drinking, for one thing, may determine the syphilitic poison in its attack on a previously irritated structure. We know that the constant percolation of alcohol may itself produce a diffused effect of somewhat similar nature.

As practical points, I should think that pain on deep pressure, increase or irregularity of liver surface, or ascites without heart or kidney affection, in a syphilitic spirit drinker, should be the guides for our diagnosis; and that, if there were no yellow tint of the skin, we might possibly differentiate between this disease and cirrhosis.

In case of a diagnosis being made, an antisyphilitic treatment might save life, and in one instance, which has since come under my notice, I have reason to hope that such was the result.

Reviews and Notices.

QUARTERLY JOURNAL OF MICROSCOPICAL SCIENCE. New Series. No. I. Edited by EDWIN LANKESTER, M.D., and GEORGE BUSK, F.R.C.S.Eng. London: 1861.

THIS Journal, of which we now announce a new series, may be fairly regarded as one of our established scientific journals. It was a wise resolve of the Microscopical Society to send out with this Journal its Transactions; so that, for eight years, its papers have appeared regularly once a quarter. Such regularity, combined with the excellence of the papers, have obtained for the Microscopical Society a large accession of members, and for the Journal so great a number of subscribers, that the publisher feels himself called on to issue a new series. There is also presented with this number an additional sheet of letterpress and additional plates, which are to be permanent. We need not now say a word in favour of microscopical studies. The microscope has taken its place with the test-tube and stethoscope, with every scientific surgeon and physician; and perhaps we could not prove this better, than by stating that seven out of eleven original papers in this number of the *Microscopical Journal* are by medical men. That they are not all on professional subjects, shews the philosophical spirit in which these gentlemen pursue their microscopical studies.

We have no hesitation in saying that, in order to use the microscope successfully on pathological subjects, the best possible training is the examination of those objects which try the highest powers of the microscope. Some of our contemporaries choose to sneer at the persevering manner in which our greatest microscopists have worked at the interesting family of the diatomaceæ; but, if they knew the history of these curious organisms, they would find that through them some of the most important microscopic discoveries had been made, and that, in the explanation of their structure, some of the most important histological questions are involved.

Amongst papers more immediately relating to medical studies, we may refer to Dr. W. Addison's "On Changes of Form in the Red Corpuscles of Human Blood". In this paper Dr. Addison has repeated his experiments on the reaction of various agents on the blood; and has added a number of further experiments, which will be read with interest by those engaged in the study of this fluid. It is still a question of deep interest as to what is the relation of the red blood-corpuscle to the histogenetic processes; and it is only by careful microscopical research that this question can be solved.

We call attention, also, to an interesting abstract in the Journal of the researches of Professor Virchow on the Trichinæ. From these it appears that *trichina spiralis* is an independent entozoon, and not the young of *trichocephalus dispar*, as stated by Professor Leuckart. Professor Virchow has been enabled to inoculate rabbits with the trichinæ obtained from the human body. He relates a case under the care of Professor Zencker, in which a woman died of trichinisation, from having eaten trichinised pork. It is worthy of note, that the author says that in no case has he been able to detect the *trichinæ* with the naked eye. He draws the following hygienic conclusions from his labours:—

> "The ingestion of pig's flesh, fresh or badly dressed, containing *trichinæ*, is attended with the greatest danger, and may prove the proximate cause of death.
>
> "2. The *trichinæ* maintain their living properties in decomposed flesh; they resist immersion in water for weeks together; and when encysted, may, without injury to their vitality, be plunged in a sufficiently dilute solution of chromic acid for at least ten days.
>
> "3. On the contrary, they perish and are deprived of all noxious influence in ham which has been well smoked, and been kept a sufficient length of time before it is consumed."

We should be doing the Journal and microscopical science an injustice, if we closed our notice without alluding to a paper in the Transactions by Mr. F. H. Wenham, "On a New Combined Binocular and Single Microscope". In this paper, Mr. Wenham has not only solved the difficulty of making a working binocular microscope, but he has described a plan by which every single microscope can be converted into a binocular, and yet be used as a single microscope. We have examined a large number of anatomical preparations with Mr. Wenham's binocular arrangement; and we confidently predict that, for all investigations requiring depth, the binocular microscope must in future be employed. Those who have experienced the relief of using a double opera-glass after a single one, will form some idea of the convenience and comfort of the double eye-piece; but the improvement in the definition and naturalness of the object seen, can only be appreciated by the direct use of the instrument. The simplicity of the arrangement by which this is effected, is only equalled by the ingenuity with which it has been applied; and, short and simple as Mr. Wenham's paper is, we regard it as one of the most important contributions made to the literature of the microscope since the paper of Joseph Jackson Lister in the *Philosophical Transactions* for 1838, describing the principles on which a compound achromatic arrangement for the microscope could be made.

Curiosities of Civilisation. Reprinted from the *Quarterly* and *Edinburgh Reviews*. By Andrew Wynter, M.D. Third Edition. London: R. Hardwicke. 1860.

We believe that we are performing an act of supererogation in recommending the perusal of this volume to our readers. The papers of which it is composed have, at various times during the last six years, been devoured by the perusers of our great quarterlies. We remember well how we have often especially singled out these essays for perusal by reason of their intrinsic goodness, at a time when we knew not who was their author.

The essays, thus collected, have met with something like an unprecedented success; for here, in the short space of a few months, we find them in a third edition, which third edition is, we understand, to be shortly succeeded by a fourth. This success is gratifying to us, not merely on account of its being the just reward of the great merits of the work, but also because it shows that the taste of the reading public, if properly and satisfactorily supplied with the right materials, tends strongly to the consideration of the great questions which affect the well-being of society. As we might suspect, several of these essays are concerned with matters which deeply interest our own profession. Lunatic Asylums; Mortality in Trades and Professions; Food, and its Adulterations; Lodging, Food, and Dress of Soldiers—all these come under the province of the medical man, and, therefore, link the work closely with our professional tastes.

As we have said, the success of the work has quite taken it out of the hands of criticism. It is, therefore, almost superfluous for us to add that we have been both charmed and instructed by its perusal; charmed by the liveliness and correctness of the narrative, and instructed by the mass of deeply interesting materials which have been so carefully and industriously collected in its pages.

The Scale of Medicines with which Merchant Vessels are to be Furnished, by Command of the Privy Council for Trade; with Observations on the Means of Preserving the Health of Seamen, etc. By T. Spencer Wells, F.R.C.S., etc. Second Edition. Pp. 212. London: Churchill. 1861.

The value of this little work is shewn by the fact that 6,000 copies of the first edition have been disposed of. This present edition has been, the author tells us, carefully revised. He has, of course, introduced the alterations made in the *Scale of Medicines*, as well as the clauses of the "Registration Act", "Merchant Shipping Act", and "Passengers Act", relating to the health of seamen. The directions given for the application of remedies, etc., are plain and simple, and to the purpose—as directions given to seamen should be. We have no doubt that this second edition will be found equally useful to seafaring men as its predecessor has proved.

On the Signs and Diseases of Pregnancy. By Thomas Hawkes Tanner, M.D., F.L.S., Member of the Royal College of Physicians; Assistant-Physician for the Diseases of Women and Children to King's College Hospital, etc. Pp. 504. London: Renshaw. 1860.

Dr. Tanner has produced a very readable and instructive book, founded both on his study of the writings of those who have preceded him, and on his own experience. The work is arranged in twelve chapters, in which the following subjects are treated of:—1. General Observations on the State of Pregnancy; 2. The Signs and Symptoms of Pregnancy; 3. The Diseases which Simulate Pregnancy; 4. The Duration of Pregnancy; 5. The Premature Expulsion of the Fœtus; 6. The Examination of Substances Expelled from the Uterus, etc.; 7. Extrauterine Gestation; 8. Superfœtation and Mixed Labour; 9. The Diseases which may co-exist with Pregnancy, and their Reciprocal Influence; 10. The Sympathetic Disorders of Pregnancy, including Disorders of the Digestive Organs, of the Organs of Respiration and Circulation, and of the Nervous System; 11. Diseases of the Urinary and Generative Organs; 12. The Displacements of the Gravid Uterus. In his discussion of the various points, Dr. Tanner gives such anatomical and physiological explanations—*e.g.*, regarding the formation of the decidua, the function of menstruation, etc.—as are necessary to the full comprehension of the subjects.

The Signs and Symptoms of Pregnancy are examined under the following heads:—Suppression of the Catamenia; Nausea and Vomiting, the action producing which sometimes also gives rise to diarrhœa and salivation; Mammary Sympathies; Enlargement of the Abdomen; Movements of the Fœtus; Changes in the Uterus; Ballottement or Repercussion; Signs Derived from Auscultation; and the Minor Signs—derived from the state of the urine, the contraction of the uterus when the abdominal parietes are handled, a discolouration of the vagina, the state of the blood, etc. Of these, several, such as suppression of the catamenia, nausea, the secretion of milk, the enlargement of the abdomen, etc., are of less value of themselves than when taken in conjunction with each other and with other signs. The sign to which Dr. Tanner, in common with most obstetricians of the present day, attaches the highest importance, is the pulsation of the fœtal heart. This sign, he says,

> "Is valuable on many grounds besides its certainty. Thus, it is quite independent of the patient's emotions; it can be sought for without her having any idea of the nature of our suspicions, while it will usually render a vaginal examination unnecessary. In the diagnosis of twin-pregnancy, the only sign on which any reliance can be placed is the detection of the distinct pulsations of two fœtal hearts at a distance from each other; the diagnosis being free from all chance of error if the beats vary in frequency in the two situations, or if a spot

exists between the two where neither can be distinguished, but from which both can be reached by passing the stethoscope upwards on the one side and downwards on the other." (Pp. 109, 110.)

With regard to the situation in which the pulsation is heard in different positions of the fœtus, Dr. Tanner's experience has been in the main confirmatory of the views put forth by Dr. McClintock, in the *Dublin Quarterly Journal of Medical Science* for 1847.

"If the mother's abdomen be auscultated at the commencement of labour, the sounds of the fœtal heart are generally to be detected in one or other iliac fossa, and more frequently in the left than in the right. The precise locality depends mainly upon the position of the fœtus; the maximum of intensity almost always corresponding to the part of the uterus with which the child's thorax is most closely in contact. In ordinary vertex presentations, the back of the thorax is the part nearest to the uterus, owing to the child's legs being doubled up on the abdomen, the chin depressed on the chest, and the whole body bent forwards so as to present a considerable convexity on its posterior part. Hence, in the first and second positions of the head (where the back of the child is anterior), we may expect to find the fœtal pulsations most audible in the right and left inguinal regions respectively; whilst in the third and fourth positions they should be more posteriorly towards the woman's loins. In presentations of the face, the front of the chest is the part which lies most contiguous to the uterine parietes; and the situations of the fœtal pulsations have been found to agree therewith, being audible anteriorly (in the iliac region) when the head holds the mento-pubic position, and rather posteriorly when it is on the opposite or mento-sacral position. As regards breech presentations and footling cases, the fœtal heart is most distinctly heard near the mother's umbilicus." (Pp. 111, 112.)

On making a rapid comparison of the chapters towards the end of the book with that part of Dr. Fleetwood Churchill's work on the *Diseases of Women* which treats of the Diseases of Pregnancy, we find in the last named work a more elaborate account than has been given by Dr. Tanner. Yet it can by no means be said that the work before us is defective in the information it affords on so important a matter; and for those who have the opportunity, we would advise a perusal of the works of both the London and the Dublin authors, so that it may be seen on what points there is agreement, and on what there is yet room for an adjustment of conflicting opinions.

Dr. Tanner informs us in his preface that, "when he commenced practice some thirteen years ago, his *horæ subsecivæ* were not altogether few and far between; and the attempt was made to turn them to account by studying and glancing through very many dusty old volumes, as well as by much miscellaneous modern reading." By how good a result this has been followed, is now patent. Combining his acquired lore of the past with his professional experience of the present, he has brought into the medical world a book which we feel it a pleasure and a duty to commend to the favourable notice of our associates as one which they will find easy in the reading, instructive in the learning, and profitable to their patients (and we hope to themselves) in the application.

British Medical Journal.

SATURDAY, FEBRUARY 2nd, 1861.

[The over-candid attentions of our critical friends have been the cause of introducing into the minds of many of our readers, and even of some of our members, a certain degree of misapprehension concerning one particular side of this Journal. We think, in justice to ourselves and to the Association, that this stalking horse of a *mal-entendu* should be quietly disposed of. We appear every seventh day contemporaneously with other weekly journals; and naturally enough we have, in consequence, to hold our own in the presence of those fellow potential agents. It is not for us to judge whether our light is kept well burning, whether we supply our readers with a proper and sufficient digest of the spirit of the medical times in which we live, and properly sustain the position and honour of our profession. This must be left to others. We have, however, our own opinion upon the subject; and the very comparison which we are now inviting proves that we have no fear of criticism in this direction. But what we desire now to bring prominently forward is this: that those who judge us should take into consideration all the elements required for the delivery of a fair judgment. We beg then to inform our critics, and those of our friends who are ignorant of the fact, that the price of the stamped British Medical Journal, as delivered to each Associate, is just a fraction over one-half the price of the other weekly journals. The price, in fact, paid by each Associate for his stamped Journal is about 4½d. per number; the price paid for the other stamped journals which appear with it is 8d. per number. It is true, that these journals give their readers a larger quantity of matter—in about the ratio of 5 to 4. These facts require no comment. All we desire is that they should be known.]

THE SCHOOL OF MINES: SCIENCE FOR THE MILLION.

Professor Huxley has lately commenced a course of lectures on the First Principles of Human Physiology, at the School of Mines, in Jermyn Street. This is one of a series of courses of evening lectures which the professors in this institution have undertaken to give to the public. Another course, on Natural Philosophy, by Professor Tyndall, is being delivered on Tuesday evenings. Dr. Hoffmann has just finished a similar course on Chemistry.

One of the objects of these courses is to indicate the course of study to be pursued by those who are candidates for the science-certificates of the Science and Art Department of the Government. These science-certificates are granted to all candidates, and give to each person who obtains them the right to claim from the Government £20 for every ten pupils he may have conducted through a course of study in any branch of natural science in which he may have obtained a certificate.

We do not know how far it might consist with the dignity of the younger members of our profession to obtain these certificates, especially with the view of teaching chemistry, physiology, and botany, in the country; but of this we are certain, that many of them could not be more usefully employed. If we are to improve the physical condition of our population; if we are to maintain our superiority in arts and manufactures; if we are to hold our great national position by the skill and bravery of our soldiers and sailors; then must we take care that the great mass of our population is instructed in the laws which God has stamped upon their nature and on the world in which they live. The medical profession has for the last half-century taken a lead in the cultivation of natural science, and the majority of its disciples and its discoverers have come from our ranks. But we have too exclusively confined the culture of these sciences to ourselves. We have regarded them as professional possessions, and taken little trouble to instruct the public. What we have lost by this has been immense. It is the ignorance by the public of natural science that leads it to listen to the pretensions of quackery and the delusions of all species of mock-science. A better educated public would give its confidence to the better educated medical men. The mind that once properly apprehended the nature of the eternal relation of cause and effect, as exemplified in the various branches of natural science, would immediately apprehend the unutterable folly and stupidity of the whole system of homœo-quackery and its infinitesimal absurdities. Our water-curers, our spirit-rappers, our phreno-Mesmerists, would disappear as a mist before the morning sun, if we could only initiate generally a system of education that should enable the human mind to comprehend the nature of the laws of cause and effect.

But this is a selfish and low ground for the medical profession to take in assisting in the education of the general public. The higher results to be obtained by teaching the laws of life are incalculable. It must have struck every medical practitioner that at least half the disease he meets with is due to preventable causes; and that, amongst classes of the community from whom he receives no remuneration, but whose wants are really the great burden of his professional life, by a diffusion of the knowledge of the laws by which we live amongst the poorer classes of the community, this [illegible] death might be prevented. Can [illegible] holier calling than th[illegible] the broken-hearted [illegible] corrupted by sin, went [illegible] ministering to the bodil[illegible]

We se[illegible] brethren whether they could employ their time more worthily or more profitably than in undertaking to teach whoever will learn the great principles of physiology. The movement has begun; and if they do not undertake it, others will. Already candidates have appeared at South Kensington, and received certificates in physiology, who have not been educated for the medical profession. This movement will go on; and we should be sorry to see any jealousy on the part of our profession, any doubt as to the necessity of popular education, any ignoble ardour after fees, or indifference to the public good, preventing them from taking a lead in the efforts that are being made to instruct the people in physiological science.

SUSPICIOUS CHARITY.

There is something scandalous, as well as grievous in the late exhibition of starvation and beggary which the prolonged frost of this winter has produced in the metropolis and elsewhere. It is much to be hoped that, when the temporary misery has passed away, the causes of this most anomalous state of things will be calmly investigated. We believe that our profession, ever foremost in works of active benevolence, has never yet taken that prominent share in the administration and distribution of relief to the distressed in body, which its experience and intimate acquaintance with the objects of charity would so well enable it to do. Our profession, therefore might well step forward and improve this occasion to the advantage of society in general, by expressing its opinion as to the causes of the great temporary misery. We have said that the late exhibition of stalwart navvies and brawny coal-heavers, etc., wandering about in bodies in our streets begging for halfpence, is a scandalous one. It is a scandal to our social system, and to the men themselves. The boasted prosperity of the working classes of this country is a mere sham, if it be unable to provide the workmen with the means of making provision for a temporary and inevitable day of distress; or else, if the prosperity be equal to such occasion, then the working classes of this kind are scandalously improvident. That they are so is a notorious fact. High wages seem to be another term for gross debauchery. What is earned by the workman over and above his necessary and ordinary expenses is spent in shameless drinking and debauchery, in the ruining or injury of his soul and body; and hence, a few weeks stoppage of work, and our workmen are reduced to utter beggary! Surely it is time that the social science men of the country took this tale into their consideration. A learned member of the Social Science Association tells us that the working classes of this country consume something like £50,000,000 per annum in spirits, beer, and tobacco.

Of this sum by far the largest portion is spent as above described. And thus it is that drunkenness fills our gaols, fills our hospitals, and fills our lunatic asylums. A large proportion of the accidents which are brought to our London hospitals are, directly or indirectly, the consequences of drinking. Brain, liver, kidney, and heart diseases, the direct consequences of drinking, are to be found in every ward; and then the swarms of miserable mothers and children who crowd the out-door departments of our medical charities are brought there by the semi-starvation they are reduced to by the husband's and the father's improvidence. One-fiftieth part of the sum above mentioned would have kept the frozen-out watermen in luxury during the late frost. Surely it is time that men, instead of talking of relieving distress, should begin to turn their energies to the drying-up of the sources of it. An esteemed correspondent calls attention to the fact that our profession does not take its true position in this high social question of administering charity; and we quite agree with him. We trust we may, on an early occasion, bring this question of charity, especially in its medical bearings, more fully before our readers. Every thinking man will sadly confess, that our charities, and medical charities among them, are doing, amidst immense good, a very large amount of evil. The provident system is the sole cure for the evil.

THE WEEK.

The medical profession has within the past week heard with the deepest regret of the death of Dr. William Baly, who was suddenly killed in an accident which happened on the South Western Railway on Monday last. The deceased was in the prime of professional vigour, and steadily and deservedly rising in reputation. He was a Fellow of the Royal Society, and will be remembered as the able translator of the *Elements of Physiology* of Johann Müller. About two years ago, Dr. Baly was appointed Physician-Extraordinary to Her Majesty the Queen; and, on the retirement of Sir James Clark last year from the Medical Council he was nominated to the vacant seat. He was also Assistant-Physician to St. Bartholomew's Hospital, and Physician to the Millbank Prison.

A homœopath is now Homœoquack-in-Chief of the Medical Staff of the Guernsey Militia. Most properly and honourably, Drs. Hoskins, De Lisle, and Mansell, have refused to march in such company. They have, therefore, tendered their resignations, and have had the honour of being relieved by Gen. Slade from any further duty as staff officers of the Guernsey Militia. We sincerely trust that the aforesaid representative of the globulistic craft will be allowed to physic alone in his glory, or, at least, only in association with others of his calling. We will candidly say, that for an event of this kind we believe much of the blame is, indirectly, to be cast at the door of members of our own profession—we mean at the door of those members of it, who encourage, harbour, foster, and patronise homœoquackery, and give it a value in the eyes of the public, by meeting in consultation and conferring with homœopaths. We shall take an early occasion of stating our views upon this subject; and we think, indeed, that our Association should clearly express its opinion on this important point of ethics. Our own opinion, as already stated, is that the most useful allies and supporters of homœoquackery are the members of our profession who have not the honourable courage to do as our brethren have done in Guernsey.

It is pleasing to record the following instance of unanimous good fellowship and right feeling existing between our professional brethren in the small town of Croydon:—

> "On Thursday, the 14th instant, Dr. Westall was entertained at a dinner by the whole of his professional brethren at Croydon, to testify the great regard felt for him, and to present him a slight testimonial in remembrance of the many years agreeable connexion which has existed between him and his brethren in the profession. The presentation consisted of a massive silver inkstand, bearing the following inscription:—'Presented to Edward Westall, Esq., M.D., F.R.C.S., upon his partial retirement from practice, by his brother practitioners, with hearty good wishes for his future happiness.' The names of the subscribers to the testimonial are—G. Bottomley; P. Hubbert; G. Cooper; C. Lashmar, M.D.; A. G. Roper; A. Carpenter, M.D.; W. Sutherland, M.D.; S. L. Henley; J. J. Johnson; H. A. Cleaver; E. Berney; S. Picken.
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> "It may, perhaps, seldom have a precedent where a professional man has received the marked approval and esteem of those who practise the same art, and that, too, of so universal and heartfelt a character. It must be clearly understood that this is a separate and distinct testimonial from the general one towards which a very large fund has been subscribed."

A trial for infringement of the Lunacy Law took place on Tuesday last, in the Central Criminal Court. The offender was Mr. Hubert E. C. Kelly, a surgeon, residing at Pinner, in Middlesex. He pleaded guilty to the charge, the evidence in support of which showed that

> "In the course of his professional practice he was called [illegible] attend upon a gentleman who was suffering from [illegible] ive, and labouring under many delusions. An a[illegible] was subsequently made that he should be re[illegible] of the defendant and be treated by [illegible] not having a licence to receive [illegible] ing no certificates as to the co[illegible] required by the Act of [illegible] were a great number [illegible] to the high character an[illegible].
>
> "Mr. Welsb[illegible], after the

facts had been briefly brought to the notice of the Court, intimated that he should be satisfied if the defendant entered into his own recognisance in £100 to appear and receive the judgment of the Court if he should be called upon to do so.

"The Recorder observed that it was a very proper prosecution, and it was highly necessary for the protection of persons in the unhappy condition of lunatics that the regulations required by the statute should be enforced.

"The defendant, having entered into the required recognisances, then left the court with his friends."

SANITARY SCIENCE *v.* SCHOOLS.

At the Association of Metropolitan Medical Officers of Health, held on Saturday, Jan. 19, an adjourned discussion took place on the following propositions, which had been supported in a paper read by Mr. Edwin Chadwick:—

"That however good the sanitary condition of schools may be, however well they may be warmed, ventilated, and lighted, the common school time of five, or six, or more hours of daily sedentary constraint required from young and growing children is injurious to their bodily development, and in violation of the laws of physiology. That any national system of education ought to provide for the physical as well as the mental training of children. That as school-houses are commonly constructed, and as schools are usually conducted, without regard to sanitary science, they are the frequent sources of disease, and of permanent bodily and mental infirmity, and tend, together with over sedentary constraint, to augment the excessive amount of infantile and juvenile mortality. That, for the prevention of these evils, special applications of sanitary science and superintendence are required.

An animated discussion took place, and the several speakers dwelt on the sanitary defects of many of our larger schools. Dr. Druitt, Dr. Lankester, Dr. Aldis, and Mr. Bruge, spoke of the high pressure system pursued in many of the London schools, and particular reference was made to the deficient sanitary arrangements of St. Paul's, Merchant Tailors', and King's College Schools.

The attention of the Medical Officers of Health in London was called to the power they had of preventing overcrowding, of requiring ventilation, and other improvements, in public schools. It was thought most desirable that, with regard to schools supported by the state, a medical inspector should be appointed to superintend the sanitary arrangements of the school.

At the same meeting, another subject of some importance to the medical profession as well as the public, was introduced by Dr. Sanderson, and that was the appointment of analysts, under the Adulteration of Food and Drink Bill. It was generally thought that th[illegible] low scale of remuneration—2s. 6d. to 10s.—for e[illegible]lysis, coupled with the fact that the local bod[illegible]m the carrying out of the clauses of the [illegible]ed had offered no salaries to th[illegible]d as analysts, would rend[illegible]e same time it was th[illegible]hese appointments sh[illegible]d medical men who h[illegible] the various branch[illegible]

Special Correspondence.

BIRMINGHAM.

[*From our own Correspondent.*]

With your readers the welfare of the Association is ever of prime importance; and, intimately connected as this is with the condition and *status* of its Journal, it is a matter of extreme satisfaction to us here to watch the marked improvement in the contents of the new series, as compared with those of its immediate predecessor. So much has been said against our Journal, in its own pages, that it would be false delicacy to abstain from noticing the general opinion here when that opinion is honestly and warmly favourable.

The last meeting of our Branch inaugurated a new *régime*, which promises a great increase of comfort in future, and, we hope, a corresponding increase in the number of members. Heretofore these meetings have been held at one of the hotels—not, perhaps, the most dignified *locale* for scientific gatherings, which were, moreover, often necessarily postponed, or relegated to small unsuitable rooms, and so on. The Midland Medical Society have recently hired a capital room at the Birmingham Library, and furnished it as a medical reading-room, and the gratuitous use of this is, by the courtesy of that Society, now permitted to our Branch. At our last meeting, Mr. Pemberton narrated a case of aneurism, which opens a new question of great importance as to the possible results of the treatment by compression. An Irishman, aged 55 (about), was brought to the General Hospital, some three years ago, with aneurism of the posterior tibial artery. By pressure, in Scarpa's space, continued off and on for the long period of six months, a perfect cure was effected; but about a year subsequently he returned with a new aneurism at the seat of pressure, and this was soon found to have a communication with the vein. *Post-mortem* examination showed a varicose aneurism, and diseased cardiac valves, to which latter disease death was evidently due. These facts cannot fail to raise a suspicion, to say the least of it, that the long pressure might have been partly responsible for the second aneurism, and for the communication between it and the vein.

Ten years ago the Queen's College Medico-Chirurgical Society was started by Dr. Heslop, and at its meetings a great deal of good solid work has been done. Last year, however, the members thought, by changing its name and place of meeting (the College), a less sectarian character would be given to it, and that its number of members and usefulness might be thereby increased. Hence the Midland Medical Society. This change seems to have been judicious: the number of members has increased, a medical reading-room has been established, and hopes are entertained that it may succeed in expanding a fair collection of medical books belonging to the Birmingham Library into a medical library worthy of the town and district. This will supply a want which has always been severely felt by those whose professional avocations render it incumbent upon them to study more than the current literature of the profession. The meetings of this Society are bi-monthly. At the last one, Mr. Furneaux Jordan exhibited a patient whose elbow he had excised in the Queen's Hospital four months ago. Motion was so completely restored that the patient could easily place the tips of his fingers on his shoulder. There was nothing special in the method of excision, which had been adopted in consequence of disease following injury by a cart-wheel. The operator laid great stress upon the importance of early passive motion. This was commenced in this case four days after the operation, and perseveringly carried out; and to this Mr. Jordan attributed the very satisfactory results obtained. I believe Mr. Gamgee has also had a case in the same hospital nearly, if not quite, as successful in its issue.

At the same meeting, Dr. Wade read a paper upon "Retro-uterine Hæmatocele," and related five cases which had come under his care. Besides entering fully into the clinical history of this highly interesting disorder, he drew special attention to a method of spontaneous cure, which seems hitherto to have escaped observation; at all events, it is not recognised by Voisin in his recent elaborate monograph. The method alluded to is by percolation of the effused blood through the Fallopian tubes into the uterus, from which it is discharged externally. Evidence was adduced to prove, not only that such a process is possible, but that it does actually occur, and perhaps not infrequently. It was also hinted that the presence of hæmaturia in some reported cases raises a suspicion that the blood *may* find its way into the bladder by fissure, as we know it does into the vagina and rectum.

The subject of "Brandy in Pneumonia" was brought before the Medical Social Society, at its last meeting, by Dr. Russell. The feeling of those present coincided with that of the author of the paper, that the free use of stimulants in inflammatory disease, as a routine treatment, was to be condemned, but that the employment of alcohol under special circumstances was imperative. It further appeared that such an use of brandy had been made long before Dr. Todd had adopted it as his hobby. This verdict probably represents the opinion of almost all whom circumstances and personal influence have not converted into partisans. The treatment of disease in Birmingham has always been of a liberal character, and yet it has been commonly remarked that alumni of King's College, however deeply imbued with the teachings of Dr. Todd, have somehow failed to carry out these teachings in anything like the degree that their master supposed. It may be remembered that, in his *Clinical Lectures on Acute Diseases*, Dr. Todd cited as proof of the correctness of his views, that they were acted upon by his pupils in after life. In this he was, as far as we have been able to see here, the victim of an amiable enthusiasm. His pupils, in after life, tacitly deserted his standard. The Medical Society is a society of a private character, but reckoning amongst its members several distinguished hospital physicians and surgeons, besides gentlemen in extensive private practice, and thus fairly represents medical opinion.

Diphtheria still lingers about the town. All the recent cases have occurred in the Lozells, a suburb on the north side of the town, standing high, and upon sand and gravel, but badly drained. The disease has always manifested great virulence in this locality, and the last cases do not exhibit any amelioration of type.

"A Dispensary Physician" drew attention in a late number to the advantage of using dispensary doctors as a channel for the distribution of ordinary relief. It may assist in the development of his views if he knows that this plan has long been in operation at the Birmingham General Dispensary, and has been found to work exceedingly well, still further enhancing the utility of this valuable and valued institution.

Progress of Medical Science.

Embolia and Thrombosis. It is now nearly fourteen years since the theory of the detachment of fragments of vegetations from the valves of the heart, and from coagula in the large veins, and of the consequent secondary occlusion of the minute arteries, was first propounded by Virchow. The term *emboli* has been applied to the small plugs detached from the valves of the heart; *thrombi* to those derived from the veins. The effects produced in the different organs by these obstructions, and the entire doctrine of embolia and thrombosis, have of late been the objects of considerable investigation. A most elaborate work upon the subject has recently been published by Professor Cohn of Berlin, (*Klinik der embolischen Gefasskrankheiten mit besonderer Rücksicht auf die artzliche Praxis*, 8vo. Berlin, 1860, p. 696), which in our opinion, has not received the notice in this country which it merits. Still more recently, an able memoir on the same subject, and a review of the entire doctrine of embolia have been published in the first number of *Schmidt's Jahrbücher* for the present year, by Dr. H. Meissner, of Leipzig. He considers the subject under the following heads:

1. Obstructions of the cerebral arteries.
2. Obstructions of the veins and sinuses of the dura mater.
3. Obstructions of the aorta and arteries of the lower extremities.
4. Obstructions of the pulmonary arteries.
5. Obstructions of the gastro-epiploic, splenic, and other abdominal arteries.

Particular attention is devoted to emboli of the cerebral arteries, of which the author has collected 32 cases from various sources. From these cases, the following conclusions are drawn:

1. Both sexes are equally liable to cerebral emboli. Of the 32 cases, 15 were females, and 17 males.

2. As to age, eleven of the cases were between 14 and 30 years of age; ten, between 30 and 40; five, between 40 and 50; and six, between 50 and 60.

3. The left half of the brain (16 cases) was more frequently affected than the right (11 cases). In 5 of the cases, the obstruction was in the middle line, and both sides of the brain were affected.

4. The most frequent site of the obstruction was in the cerebral carotid (nine times in one, and twice in both); the next, in the profunda cerebri or posterior cerebral artery (8 cases); and the next, in the artery of the fissure of Sylvius (7 cases). It was in the basilar artery in 4 cases; in the vertebral in 2 (in one of these, both vertebral arteries were blocked up); and in the arteries of the corpus callosum, in 2 cases.

5. Softening of the corresponding parts of the brain almost universally follows the obstruction. In 2 only of the cases, was there merely hyperæmia of the cerebral matter; and in 2 others no change whatever could be discovered.

6. In all but two cases, there was paralysis of the side of the body opposite to that of the obstruction.

7. Loss of consciousness during the attack was only observed twelve times.

8. The attacks were almost invariably sudden (30 cases). In 2 cases only had there been premonitory symptoms. Eight times, repeated attacks of paralysis had occurred. In one case only was the commencement of the paralysis gradual; while, in one other, its mode of commencement was unknown.

9. The heart was diseased in 25 cases. In 22 cases there was disease of its walls or valves; in 2 there was merely hypertrophy; and in one case there was an aneurism of the ascending aorta. In 7 cases, nothing abnormal could be detected in the heart.

10. In 15 cases there were obstructions of vessels in other parts of the body, or infarctions.

11. Among the co-existing diseases, phthisis, syphilis, and alcoholism were the most frequent.

From these cases, collected by Dr. Meissner, it is obvious, that the so-called emboli of the cerebral arteries cannot always be derived from vegetations on the valves of the heart. Cases are quoted from Bristowe, Jenner, Tüngel and Hasse, where there were all the ordinary appearances of emboli of the cerebral arteries, but where the heart was perfectly healthy, and where no other source could be discovered in the body, from which clots could have been detached. In such cases, the lesion must be attributed to a local coagulation or spontaneous arteritis.

In the case of the pulmonary arteries, the plugs may be derived from coagula in the larger veins, or the coagulation may be of a local character, and result from a morbid condition of the blood, from dilatation of the right side of the heart, a firm fatty degeneration of its muscular tissue. Either of the two last mentioned causes will impede the progress of the blood through the lungs, and so favour its coagulation and the development of obstructions. (*Schmidt's Jahrbücher*, 1861, No. I, page 89.)

Cases of Rupture of the Lung, without Fracture of the Ribs. A case of this nature occurred lately in the practice of M. Marjolin at the Hôpital Sainte-Eugénie. The patient was a boy, aged 13½. On December 3rd, 1860, the wheel of a dray, containing two casks of wine, passed over the front part of his chest. When brought to the hospital, there was a contusion on the fore part of the chest, and the boy was labouring under extreme dyspnœa. There was no hæmoptysis, nor hæmatemesis, nor subcutaneous emphysema, nor any pain in the belly; nor could any fracture of the ribs be made out. On auscultation, the natural vesicular murmur was heard all over the left side of the chest; but on the right side there was amphoric breathing with metallic tinkling. It was impossible to percuss this side on account of the dyspnœa. On the 5th, the patient died. On *post mortem* examination, the right lung was found to be ruptured in two places. One rupture was situated near the anterior margin of the upper lobe, and was nearly half an inch in depth; the other was at the junction of the upper with the middle lobe. The pleural cavity contained eight or nine ounces of blood, and the surfaces of the lung and of the opposed wall of the chest were covered by layers of recent lymph of considerable thickness. The right lung and pleura were perfectly normal. The third and fourth left ribs, and the third right rib were incompletely fractured. It was only the external surface which was fractured, and the corresponding pleural surface was quite intact. (*Gaz. des Hôpitaux*, Dec. 29th, 1860.)

A case, very similar to this, was recorded in the last volume of the *Guy's Hospital Reports*, by Mr. Thomas Bryant, (3rd Ser., vol. vi, p. 43). The patient in this was a boy, seven years of age. Most, if not all, of the cases of this nature which have been recorded, have happened in children. In young persons the ribs are so elastic, that it is very difficult to break them. Ambroise Paré mentions the case of an infant, 22 months of age, over whose chest, the wheel of a carriage, containing five persons, passed twice, without causing any fracture.

Sugar as a Remedy for Intoxication. M. Lecœur recommends common white sugar, as calculated to prevent the development of the phenomena of intoxication, resulting from alcohol and substances containing it. From five to ten pieces of moderate size are to be taken in succession, just as the symptoms of intoxication are beginning to develope themselves. The sugar is supposed to act either by modifying, retarding, or altering the mode of fermentation taking place in the stomach, or by combining with and neutralising the acids which are generated in the stomach, in consequence of the imbibition of alcohol. (*Gaz. Méd. de Lyon*, January 1st, 1861.)

Arsenite of Strychnia in the Treatment of Scrofulous Affections and Glanders. An Italian physician, M. Grimelli, recommends this substance as highly useful in the treatment of scrofulous affections, of ulcers simulating cancer, spina ventosa and caries. It is administered internally, in doses of one-thirtieth of a grain, two or three times a day, and at the same time it may be sprinkled, in combination with starch, over any ulcerated surface which may exist. In the case of horses, labouring under farcy or glanders, its curative properties, in doses of two or three grains in the day, are spoken of as often marvellous. The substance is prepared by simply dissolving strychnia in a saturated aqueous solution of arsenious acid. A crystalline precipitate is thrown down, which is the arsenite of strychnia. (*Gaz. Medica Italiana.* Dec. 17, 1860.)

Dover's Powder as an Antisudorific in Phthisis. This remedy is highly extolled by M. Descamps, as one of the most useful which we possess, for preventing the colliquative sweats of pulmonic consumption; while, at the same time it checks diarrhœa, eases the cough and tends to induce sleep. The medicine is administered, in doses of 50 *centigrammes* (7¾ grains), just at the time when the colliquative sweats usually commence.

This unusual application of Dover's powder was first recommended in 1842, by M. Lacoste, who was led to its employment, from observing its beneficial effects in arresting the profuse perspirations of acute rheumatism. (*Archives Belges de Méd. militaire*, 1860.)

Subcutaneous Resection of the Inferior Maxilla. A Spanish surgeon, Dr. Fernando Castresana, lately extracted a sequestrum, which involved nearly one-half of the inferior maxilla, from a child aged 9 years. The bone was removed from the interior of the mouth; the operation was unattended by hæmorrhage; recovery was rapid; and there was no subsequent deformity. (*La Espana medica*, Dec. 15th, 1860.)

Resection of the Scapula. A new method of removing the scapula has been recommended by a French surgeon, M. Pétrequin. Its chief characteristic consists in leaving behind the glenoid cavity, the coracoid process and the end of the acromion, so as to ensure the preservation of the movement of the arm. The bone is divided by means of a chain-saw. One case is recorded, where the operation was resorted to, on account of an osteo-sarcomatous tumour, occupying the infraspinous fossa. The patient, however, died on the seventh day. (*Gaz. Méd. de Paris*, Jan. 5th, 1861, p. 8.)

Complete Removal of the Parotid. M. Marzolo, an Italian surgeon, records the case of a woman aged 50, from whom he had removed the entire parotid, without injuring the facial nerve or the external carotid artery. (*Gaz. Méd. de Paris*, Jan. 5th, 1861, p. 9.)

Endermic Use of Animal Fat in Typhoid Fever. Dr. P. De Lacy Baker extols the endermic application of animal fat, in the treatment of typhoid fever. He conceives that it acts: 1. By keeping in its normal activity the eliminating functions of the skin; and 2. By its absorption into the system, supplying materials for combustion, and so preventing that destruction of tissues, which otherwise would of necessity result, in the course of continued fever, from sufficient nourishment not being taken by the mouth to supply the constant waste going on in the animal economy. (*American Journal of Med. Science*, Oct., 1860, p. 574.)

It may be mentioned, that the inunction of oily substances into the skin, was several years since recommended in Germany as a mode of treating scarlet fever.

Treatment of Delirium Tremens by large doses of the Tincture of Digitalis. Two cases of this plan of treatment are recorded in the *American Medical Times* for December 1st. In one, ʒij of the officinal tincture were given every three hours, from ten o'clock a.m., till half-past twelve at night. From the administration of the second dose, until the patient went to sleep at half-past twelve, he was quiet and docile; at this time he fell asleep and remained so till eleven next day, when he awoke quite well. In the second case two drachms were given, followed by a similar dose in two hours more, when the patient fell asleep. The chief effects noticed were diminution in number of the pulse, increase in volume, profuse diuresis, skin cool without clamminess; delirium, at first busy and boisterous, became less busy but not muttering. (*London Medical Review.*)

Association Intelligence.

METROPOLITAN COUNTIES BRANCH: GENERAL MEETING.

A General Meeting of the above Branch was held at 37, Soho Square, on Wednesday, January 30, at 4 p.m.; John Birkett, Esq., President, in the Chair.

Special Hospitals. The subject of special hospitals, for the consideration of which the meeting had been principally called, was brought forward; and, after a discussion, which was shared in by Dr. Stewart, Mr. Webber, Dr. J. Seaton, Mr. H. Thompson, Dr. Camps, Dr. Richardson, Dr. E. Smith, Mr. W. Adams, Dr. S. Gibbon, and Mr. W. Martin, the following resolution, proposed by Dr. Richardson and seconded by Dr. Camps, was carried:—

"That a liberal scheme in the organisation of general hospitals is the primary consideration in Hospital Reform; while the system of special hospitals is a secondary consideration, and often the result of necessity."

SHROPSHIRE SCIENTIFIC BRANCH.

The First Meeting of this Branch was held at the Lion Hotel, Shrewsbury, on January 25th: H. Johnson, M.D., President, in the Chair.

The programme consisted of a morning meeting to transact the business; a dinner at five o'clock; and an adjournment to a conversazione, at the Museum, at eight o'clock. To the latter a number of scientific gentlemen were invited.

At the morning meeting, an able address was delivered by the President; and some excellent papers read, one by Dr. Newman, formerly house-surgeon to our Infirmary.

The conversazione was held in the Museum and the rooms of the School of Practical Art, which were brilliantly lighted up with gas for the occasion. The walls were covered with Government casts and models, which were arranged by Mr. Bowen, who also supplied a magnificent collection of valuable etchings and engravings.

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, January 22nd, 1861.

F. C. Skey, Esq., F.R.S., President, in the Chair.

ON THE RESTORATION OF SUSPENDED ANIMATION IN PERSONS APPARENTLY DROWNED. BY J. S. CHRISTIAN, M.R.C.P.

Two societies—the Royal Humane Society and the National Life-Boat Institution—issue instructions, which are widely circulated, as to the best mode of restoring suspended animation in persons apparently drowned. These rules differ not only in detail, but in principle;

1. As to the mode of performing artificial respiration.
2. As to the propriety of using the warm bath.

On each of these matters, the author stated his desire to elicit an expression of opinion from the Fellows of the society, after laying before them some considerable experience acquired during twelve years as medical officer to the Royal Humane Society in Hyde Park.

The number of cases of submersion for twelve years was 443. Of these, 181 were rescued and recovered without treatment; 165 were brought to, and recovered by treatment at Receiving House; and 97 were brought dead, or the treatment was unsuccessful. The number of cases of submersion for the last four years was 140. Of these, 68 were rescued and recovered without treatment; 38 were brought to Receiving House and recovered; and 34 were brought dead, or were not restored. Fifteen of these cases were treated by the Marshall Hall Method, and three recoveries followed; the rest were treated by the rules mentioned below.

As to the mode of performing artificial respiration, the method recommended by the Life-Boat Institution is what Dr. Marshall Hall called his "Ready Method", while that now used by the Royal Humane Society is the method of Dr. Silvester. On Dr. Marshall Hall bringing his method under the notice of the Royal Humane Society, the committee adopted means immediately to give it a fair trial. Copies of his Instructions were sent to all their medical officers, numbering one hundred and twenty, and the boats of the society on the Serpentine had a platform made to each, on which to manipulate directly the body was taken from the water, and the boatmen were instructed and practised in the performance of the operations as he directs. After giving the method a full trial in about fifteen cases, the very intelligent superintendent, the boatmen, and the author, became so satisfied of its inefficiency to restore animation, and of the difficulty of properly carrying out the manipulations, that he felt himself justified in representing those facts to the committee, and in adopting the plan recommended by Dr. Silvester, which he believed in every way to be superior, more manageable, less likely to injure the patient, will fill the chest with and expel air from it more fully, and will not force the contents of the stomach upwards, and in the way of respiration.

The following are the directions for treating the asphyxiated at the Receiving House, Hyde Park:—

"Wipe the mouth and nostrils directly the body is taken from the water.

"Use Dr. Silvester's method; at the same time let the body be taken as quickly as possible to the Receiving House, and place it in the bath up to the neck.

"Raise the body in twenty seconds from the water, and dash cold water against the chest.

"Pass ammonia under the nose.

"Use again Dr. Silvester's method, and the inflating apparatus, if it fail.

"Remove the body from the bath, and rub the surface with dry hot towels, perseveringly continuing the other treatment."

After many experiments, the author had come to the conclusion that inflation of the lungs by Dr. Silvester's method or by the society's apparatus is the first remedy, and the shock of the warm bath the second; that after eight minutes complete submersion, recovery is hopeless; and that when ten minutes elapse after being taken from the water without any effort at respiration, it is equally so. On the subject of the warm bath, which has excited so much discussion as a remedy, he remarked that it must be understood that it is used as an immediate and powerful excitant; and it had so frequently happened (twice while he was actually present) that a person brought in as asphyxiated, who to the bystanders was apparently quite dead, immediately on being placed in the bath gave the sob or gasp which is the precursor of respiration, that it might be boldly stated to be a most valuable adjunct to treatment, and, properly managed, in no way pernicious. He concluded by citing a letter from Sir Benjamin Brodie to the Royal Humane Society, confirming the preceding conclusions.

ON AN OPERATION FOR PERVIOUS URACHUS.

BY THOMAS PAGET, ESQ., LEICESTER.

[Communicated by William Bowman, Esq., F.R.S.]

The paper was on the removal of this fortunately rare but very distressing congenital defect, by paring and adaptation, and illustrated the practicability of this by two instances, one of which was the case of an infant, four months old; the other, the sequel of an adult, whose case was published in the thirty-third volume of the Society's *Transactions*, and where a ring-shaped stone was formed upon a pubic hair, and extracted by the finger at the open urachus. In both, the closure by the operation was complete, and the operation established.

MEDICAL SOCIETY OF LONDON.

Monday, January 28th, 1861.

A. B. Garrod, M.D., F.R.S., President, in the Chair.

THE PHYSIOLOGICAL AND THERAPEUTIC ACTION OF THE TURKISH BATH. BY J. L. W. THUDICHUM, M.D.

After some preliminary remarks, Dr. Thudichum stated the subject of his paper to be the application of hot air to the human body; not moist air nor vapour in any form, but the immersion of the whole body in hot common air. He had made personal experiments, and felt that there was placed in the hands of the medical profession a most powerful and certain, and at the same time most safe and agreeable therapeutic agent.

Hot air, Dr. Thudichum said, had none of the mischievous effects on the body that had been attributed to it. On the other hand, Blagden, Solander, Banks, Dobson, Fordyce, Adanson, and Johnson, had been exposed to atmospheres varying from 200° to 260° Fahrenheit, for periods varying from five minutes to a quarter of an hour. The author himself had been in a temperature of at least 230° for five minutes; the thermometer being full to bursting. The human body is therefore capable of supporting a degree of heat far above the boiling point of water, and greatly above the temperature at which blood would coagulate out of the body.

When the naked body is exposed to a temperature of 120°, the cool parts become warm, and the distant limbs assume the general temperature of the body. The skin becomes supple and moist; the circulation is rapid and easy; the breathing becomes shallow, and never calls for the expansion of the entire chest. Sighing, oppression, and short breath, disappear; man and mind become easy; fatigue vanishes; and, disposed to rest, the body is able to enjoy its own existence for its own sake. At 155°, a feeling of heat is experienced under the nostrils, but is soon avoided by breathing through the mouth; the skin sweats profusely; the pulse rises to 100, 120, or 140, in the minute; the carotids and the heart beat highly; and yet there is an entire absence of turgor in the venous system. The respiration is wonderfully free. At 212°, Dr. Thudichum observed that a scar of about half an inch square surface became bloodshot, if it were not moistened artificially. Strong pulsation continues at this temperature. When no symptoms are produced which make the bather desirous of retiring from the heated air, temperatures up to 300° are borne; and the effects which drive one out of the bath begin with smarting in the nails of the hands and feet.

When the hot air ceases to be agreeable, it produces, in novices alone, undesirable though harmless effects. The condition thus induced, Dr. Thudichum stated not to be syncope; for in no case which he observed was there diminution of the heart's action. It is anæsthesia. Recovery from it is sometimes effected by sleep, sometimes by a fresh draught of water or of air. Cold water thrown on the feet is the Turkish remedy. No case of true syncope, or of apoplexy, or of death from any cause, produced by the bath, was, according to the author, on record. Dr. Goolden had recorded a case of hæmorrhage from the lungs, which might perhaps find an explanation in the fact already mentioned of a scar becoming blood-shot at a high temperature.

Dr. Thudichum next detailed some experiments which he had made on the temperature of the body; premising that the experiments of previous observers had been made on subjects surrounded by air of a temperature far below that of the blood.

At 5 p.m., the air being at 56°, Dr. Thudichum found the temperature under his tongue to be 99°; and another person of his size and age exhibited the same temperature. At 11 p.m., the temperature of his mouth being 100, he entered a bath at 120°; in one hour, no effect was produced. He then entered a room at 190°; in five minutes, the thermometer under his tongue had risen to 104°, and in five minutes more to 105°. Having again cooled down in the temperate room (120°), he found the temperature in a fold of skin in the right hypochondriac region, and in the axilla, to be 100; after an hour and a half in this room, the urethra two inches from the orifice was at 100, and the rectum, two inches from the outer aperture, was at 103°. After the body had been exposed in every part to a stream of water three-fourths of an inch in diameter, the glans was at 76°, and was insensible; the urethra, two inches above this, was at 80°.

Thus far, the experiments showed that the blood and tissues may be subjected to temperatures between 76° and 105°; but the extremes are probably much higher, for fever heat is estimated at 112°, and the temperature of parts may be reduced by Dr. Arnott's plan below that of the freezing-point of water.

After some observations on the structure and physiology of the skin, Dr. Thudichum described the result of several analyses which he had made of sweat collected from the bodies of persons in the hot-air bath. The secretion, collected by the *strigil*, by sponges, and by the *cummerbund*, was treated with alcohol; saturated with ether; filtered; and analysed for urea by nitrate of protoxide of mercury, for sulphates and phosphates by baryta, and for chloride of sodium by silver-solution and soda tests. The analyses were to be extended; but, so far, they had furnished the following results.

The secretions of the skin are volatile and solid. The volatile portion consists of carbonic acid; water; and some volatile acid, not yet accurately determined. The fixed ingredients are, urea; chloride of sodium; fatty matter; earthy salts of some fatty matter; small quantities of some other alkaline salts. Dr. Thudichum had never found sulphates or phosphates in the excretion. In regard to quantity, the ingredients of the cutaneous secretion come in the following order: water; carbonic acid; chloride of sodium; urea; other ingredients. The presence of water and of carbonic acid constitutes the analogy of perspiration with the secretion of the lungs; the presence of urea and chloride of sodium with that of the kidneys. But the excretions are not capable of mutual substitution; for, while the kidneys remove phosphates, sulphates, and uric acid, with colouring matter, the skin removes volatile acid, and the lungs are restricted to carbonic acid and water.

As a therapeutic agent, Dr. Thudichum suggested the utility of the hot-air bath in kidney-diseases, acute or chronic; in cholera; in typhus and yellow fever; in cancer (in the juice of which he had found a remarkable quantity of chloride of sodium); in hydrothorax; in consumption; in chronic bronchitis; in obesity; in eczema; and in angina. He stated the bath to act by relieving the lungs and kidneys from excess of work; by discharging noxious matters; by invigorating and animating declining life; and by multiplying the effects of other agents. The bath accelerates nutrition, and increases the appetite.

Dr. Thudichum concluded by calling attention to the danger that the design of introducing the hot-air bath into this country might be frustrated by interested motives and empirical innovations. But hot air, combined with cold affusions, shampooing, and exposure of the body to light and air, awaited the approval and application of the Fellows of the Society.

Dr. RICHARDSON thought the Society would be unanimous that the subject brought forward was one not only of professional, but of national interest; that the subject admitted only of true scientific discussion in a society where physiological and practical labours were so happily blended; and that no one could have brought forward the subject with more acumen and ability than Dr. Thudichum. He then proceeded to make some observations which are given in full at p. 114.

Dr. W. R. ROGERS had been recently informed of a case in which a gentleman had returned ill from a hot-air bath. At the same time, he had observed good effects produced by this agent. He agreed with Dr. Richardson as to the fear of degeneration from too close an addiction to the bath; and he would prefer exercise and friction as means of stimulating the action of the skin.

Dr. TILT suggested care in the use of the bath, as our knowledge of its action is at present in its infancy. He had seen three cases of fainting at the different establishments; one person, who had fainted in the bath at 110°, remained in this state for three-quarters of an hour.

Dr. E. S. THOMPSON asked how the feeling of cold after the bath is to be prevented.

Dr. W. R. ROGERS had recently seen several cases of severe cold and loss of voice follow the use of the hot-air bath.

Mr. KIALLMARK thought the bath was to be used as an addition to exercise, etc.; not as a substitute.

Dr. JAMES BIRD concurred with Dr. Richardson as to the physiological effects of hot air. He had had experience of hot air in India during fifteen years; and the effect was not so favourable as had been represented by Dr. Thudichum. If it were, there would not be the degeneration which so notoriously affects Europeans in India. Dr. Bird went on then to comment on the process of acclimation, which consists in an adaptation of the functions of the excreting organs to the climate, and is required for those who return from hot countries, as well as for those who go to them. The process of acclimation has not yet been properly considered in this country. Researches are required, similar to those made by the French on the climate of Algeria. Unless the Turkish bath is used in aid of acclimation, its application may prove very mischievous. But, if properly administered, with caution and under medical advice, it may be useful in removing symptoms. Dr. Bird had himself derived great benefit from it on his return to England from India.

Two VISITORS referred to instances of pulmonary congestion, and to severe symptoms in a patient with aortic disease, as having been seen by them to follow the use of the bath.

Dr. RICHARDSON asked Dr. Bird whether the state described by Dr. Thudichum was similar to the condition produced by the heat in India; and whether he considered that the character of the Hindoos had been affected by the high temperature.

Dr. BIRD replied in the affirmative to both questions.

Dr. HAWARD had seen the hot-air bath used both in Turkey and in England; and he knew that the Europeans in Constantinople who use the bath are specially liable to bronchitis and pneumonia. He feared that the extension of baths may lessen the amount of exercise.

Mr. URQUHART (who was present as a visitor) would not speak on purely medical subjects. But, as to cases in which bad effects were produced, he would state that he had never seen any such to occur. At the same time, he did not dispute the occurrence of such cases; and was pleased that they had been brought forward, as they would furnish caution as to the use of the bath. As to the effects of the bath, he had always found himself reinvigorated by entering it for five or ten minutes, when he was fatigued by mental labour. The Tartar couriers in the East also obtain repose by the use of this agent, and of stimulation of the skin by flagellation. He said that there were no true Turkish baths in this country. The true Turkish bath is a heated apartment, without vapour; and travellers had derived erroneous impressions of it from entering it at an hour when it was filled with vapour from the bodies of the Turks who had already used it before sunrise.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, JANUARY 17TH.

E. H. SIEVEKING, M.D., President, in the Chair.

The Ethnology of the Malays of the Cape. By Dr. LEVISON. The author's object was to draw attention to the fact which he stated of the great resemblance which still existed between them and their parent stock; a resemblance holding good even in the diseases to which they are most peculiarly liable. He considered this due to their having retained in a foreign land their national costume and religion, and the practice of strict intermarriage; and the conclusion he drew was, that the physical changes in a nation were more dependent upon mental influences than traceable to the effects of climate: if ever these Malays were converted, he should expect them to change greatly, both in colour and stature.

In the discussion which followed, Dr. Drysdale, Dr. Browning, Dr. Greenhow, Mr. Sedgwick, and the President took part, the latter remarking upon the dissimilarity of the author's views to those put forth by Mr. Buckle from personal observation.

Mr. SEDGWICK considered that the Malays of the Cape had degenerated both in language and *physique*.

Supposed Empyema; Ineffectual Paracentesis; Malignant Disease. Mr. James R. Lane related the particulars of a case in which, under the sanction of three physicians, he had thrice ineffectually attempted the operation of paracentesis thoracis, in a boy nine years of age, for supposed empyema. The diagnosis was rendered more difficult from fluid having upon one occasion followed the introduction of the trocar. After death, one side of the chest was found filled with a mass of malignant disease, hard in the centre, but soft externally, having cysts connected with this latter portion. It was from one of these cysts the fluid had escaped.

Dr. Stewart mentioned a case, which had recently occurred in his own practice, of violent flooding following abortion at the third month, which he supposed to be dependent upon a small polypus to be detected protruding from the os uteri. In the progress of the case, some most offensive flocculent matter was passed; and, as upon a subsequent occasion no polypus could be detected, he considered it to have sloughed away.

Correspondence.

POOR-LAW MEDICAL REFORM.

Letter from R. Griffin, Esq.

Sir,—I must again beg the favour of your affording me space in your Journal to inform the Poor-law medical officers that I have amended the Bill in accordance with the suggestions of the greater number of those officers who have obliged me with their opinions. I have also added a superannuation clause, to come into operation after not less than ten years service, should the officer resign from any infirmity of mind or body which would render him incapable of performing his duty. This clause has been inserted in consequence of my having ascertained that three hundred Poor-law medical officers resigned last year; and that, out of this number, the names of sixty-five appear in the obituary—a frightful mortality; and no doubt some of the survivors gave up their appointments owing to illness rendering them unable to perform their duties.

Since November last I have received, from sixty medical officers, subscriptions amounting to £28:7, which will about cover the expenses incurred up to that time. It is, however, desirable that the Bill should be placed in the hands of a parliamentary draftsman, to prevent its being thrown out on technical grounds. For this purpose, I am informed, £20 at least will be required; and, as we are sure to meet with very considerable opposition from Boards of Guardians, and possibly even the Poor-law Board, it is extremely desirable that the facts, quotations, and arguments in favour of the Bill, should be printed and forwarded to each member of Parliament; but to do this requires pecuniary support. I have forwarded a copy of the amended Bill to Mr. Pigott, with a request that he will favour me with the name of the honourable gentleman into whose hands he proposes to place it; but, in case Mr. Pigott should fail, it would be well to be prepared for the contingency. If, therefore, any gentleman should know a member of Parliament who will undertake the charge of the Bill, and will favour me with his name, I will supply him with the requisite information.

I am, etc., Richard Griffin.

12, Royal Terrace, Weymouth, January 26th, 1861.

P.S. A copy of the amended Bill shall be forwarded to all who have subscribed within the last six months, and to any gentleman who may shortly send a remittance in aid of the cause. I regret the state of the funds will not permit me to do more.

CHILD-MURDER AND WET-NURSING.

Letter from C. H. F. Routh, M.D.

Sir,—Your remarks about child-murder and its relations to wet-nursing, I think, are imperatively called for. In my work on *Infant Feeding* I have devoted a whole chapter to the subject. This chapter I did offer to the Obstetrical Society as a contribution; but our late lamented President, Dr. Rigby, deemed it inadmissible, because treating on a question of ethics. It was, however, read, and fully discussed, before the Medical Society of London. It is not necessary, therefore, to speak at length on the subject now; but I do believe that the wholesale consignment of babies to wet-nurses, and these almost invariably fallen women, is highly improper, and, in most cases, quite unnecessary.

First. The mere substitution of wet nurses for their mothers, with children suckling, increases the mortality at least eleven per cent.

Secondly. The influence of a fallen woman employed as a wet nurse is an incentive to crime. Seduction is made more easy. The example, and the prospect of lucrative employment, are often powerful inducements to ill-paid and hard-worked servants; nor is her presence likely to improve, in most cases, the moral tone of the head of the household.

Thirdly. It encourages infanticide. Mr. Acton has given us a list of 846 babies recorded officially as hanged, strangled, poisoned, and suffocated, and so forth, which, he adds, "we are justified in assuming were the illegitimate offsprings of first falls in virtue." Mr. Wakley informed me that he believed that in London at least 200 cases of infanticide annually escaped detection.

Fourthly. It almost always ensures the death of the wet-nurse's child. Dr. Bachoffner, speaking after sixteen years experience as a district registrar, states it as a remarkable fact that within three weeks of the birth of illegitimate children he has been called upon to register their deaths, from mesenteric disease, diarrhœa, inanition, and other diseases resulting from the mode of feeding, and deficient attention.

Here, then, are four great objections to the practice of employing wet-nurses. It is, in fact, feeding the social evil. I am informed that the mothers of illegitimate children confined in our workhouses have, for the most part, had children before. But the system is the more culpable, because, in most cases, unnecessary. Good artificial food, judiciously selected, and not intermingled with vegetable elements, will, in combination with even but a very small quantity of breast milk supplied by the mother, prove sufficient. I am, etc.,

C. H. F. Routh, M.D.

52, Montague Square, Jan. 18, 1860.

WET-NURSES.

Letter from Graily Hewitt, M.D.

Sir,—In an article in the Journal of Jan. 19, you call the attention of the profession, and very properly, to the subject of the employment of wet-nurses, in its relation to the profession and the public.

There can be no question in the mind of any thinking man that it is not right to imperil the life of one child for the sake of another *unnecessarily*; and it must be confessed that the practice followed by many ladies belonging to the higher classes of society of systematically giving over the care and sustenance of their offspring to a wet-nurse hired for the occasion has been too often and too silently acquiesced in by members of the profession. It is high time that this moral laxity, to call it by no worse name, on the part of those who are called upon to sanction this practice by their advice and cooperation should cease, and that the profession, as a body and as individuals, should take every opportunity of putting an end to this quiet but effectual means of infanticide.

Upwards of a year ago the subject was brought before the notice of the weekly Board of the British Lying-in Hospital, by Mrs. Baines, a lady well known as having done much in directing public attention to the subject of infantile hygenics, and the Board were requested to cease to countenance the practice of allowing wet-nurses to be hired from the hospital indiscriminately. I felt it my duty, as one of the medical staff of the hospital in question to support the application thus made, and on Sept. 8th, 1859, the Board came to a determination on the question, expressed as follows:—

"The Board, considering that it is advisable to refrain, as far as possible, from encouraging the employment of wet-nurses, except in peculiar cases, *Resolved*—Any person desirous of engaging a wet-nurse at, or by means of this hospital, must produce a certificate from their medical attendant stating that, for the safety of the mother or child, it is absolutely necessary that a wet-nurse be engaged."

Further steps were taken to secure the carrying of this resolution into effect, by keeping a register of applications, and inspection of the same by the Board from time to time.

At the risk of offending the prejudices of some of their supporters, the weekly Board of the British Lying-in Hospital deemed it right to come to this conclusion on the subject, and there can be little doubt that if other similar institutions could be induced to follow a like course, and the profession at large were only to do their duty, the public would soon be led to regard the matter in its proper light. It is hardly to be conceived that after being made aware of the disastrous results which, in very many cases, accrue to the unfortunate child of the wet-nurse, many ladies would, unless under very exceptional circumstances, countenance a practice so utterly opposed to all sense of justice, so entirely selfish, and so revolting to humanity, as the bribing of a needy woman to part with that on which the health, frequently the life, of her own child depends.

I am, etc., Graily Hewitt.

36, Berkeley Square, Jan. 23, 1861.

WET-NURSING.

Letter from H. Terry, Esq.

Sir,—I have read your leading article this week, on the subject of wet-nursing, with the warmest feelings of concurrence and approbation; and I am very much pleased to see you, at this early period of your labours as editor, coming forward with integrity of purpose and intrepidity to attack what I consider one of the most pernicious habits and evils of the present day. You ask your brother-associates to express their opinions on this subject; and as mine, through a long course of years, has always been a very strong one, I am induced to accept your invitation, and send you a short letter.

I consider that, as a system, wet-nursing is most objectionable, and, in all but a very few exceptional cases, morally as well as medically unjustifiable; yet it is adopted in the highest society, and sanctioned, I fear, by the highest medical authority. I feel that a very heavy weight of responsibility rests on our profession in this matter, implying something like a sacrifice of judgment on the shrine of fashion and convenience. I can hardly bring my mind to believe that, in the great majority of cases where wet-nursing is had recourse to, the medical attendant really thinks it essential to the good of his patient that it should be so. We are generally able, I think, to associate the period of nursing with the mother's finest health; and we can often appreciate the advantage her system derives from nine months rest from the state of pregnancy. I have, indeed, a very decided opinion that the unnatural check and suppression of so great a function as the secretion of milk cannot be in all cases adopted with impunity; but rather that, in many cases, a latent tendency to disease, if not originated, is brought into activity by weaning; and I am not sure that the very great prevalence of uterine and mammary disease now known to exist is not, in some degree, attributable to the increase of this interference with one of Nature's most established laws.

Here is a means we have, if we concur in these sentiments, fully adequate to do away the evil complained of. The very slightest suggestion of the possibility of disease being produced by weaning would, I believe, in almost every instance, induce the mother to nurse her child; and how great in every respect would be her recompense and reward!

I will say but little on the moral evils attendant upon the employment of a wet-nurse. But how can I calculate the amount of them? How can I appreciate the consequences which may ensue from taking away the mother from her child, and the wife from her husband; and, *I add emphatically*, at this particular period of her recovery from long indisposition? The more than probable relation which exists between wet-nursing and child-murder is indeed a grave question; and I do earnestly hope that, as you suggest, some member of the Obstetrical Society will, at no distant period, urge a debate on the general subject.

In a recent address at Liverpool, on "Public Health", Lord Shaftesbury stated that not fewer than sixty thousand still-born children are produced in this country every year; and he added, "This is a portentous fact, which demands a most solemn investigation." I think that in every case of still-born child, where there has not been in attendance some competent and trustworthy practitioner, either male or female, a coroner's inquest should be held. I am, etc.,

H. Terry, F.R.C.S.,

Surgeon Extraordinary (late thirty-three years Surgeon) to the Northampton General Infirmary, etc.

Northampton, January 24th, 1861.

Medical News.

Royal College of Surgeons. The following gentlemen were admitted members on January 29th:—

Cooper, Alfred, Bernard Street, Russell Square
Davidson, Christopher M., Hobart Town
Dawson, John, Limerick
Ellis, Thomas S., Eastington, Upton-on-Severn
Gilbert, Robert H. T., Kensington
Kough, James O'Brien, Shrewsbury
Long, Charles F., Barham, Kent
Mercer, John T., Leicester
Patten, Charles A., Ealing
Simmons, Benjamin, Henley-on-Thames
Stillwell, James, Norton Folgate
Symons, John, Exeter
Tweedale, Thomas, Upper Mill, Saddleworth
Wise, William C., Plumstead, Kent

At the same meeting of the Court—

Meiklejohn, John W. S. (M.D.Edin. 1851), of Greenwich Hospital, passed his examination as Naval Surgeon.

APPOINTMENTS.

Royal Army. The following appointments have been made:—

Bews, J. H., Esq., from 49th Foot, to be Staff-Surgeon, *vice* Sanders.

Brady, T. C., Esq., Staff-Assistant-Surgeon, to be Staff-Surgeon, *vice* Moline, deceased.

Deakin, J. F., M.D., Assistant-Surgeon, from 70th Foot, to be Staff-Assistant-Surgeon, *vice* Waters.

Greer, A. J., Esq., Assistant-Surgeon, from 21st Foot, to be Staff-Surgeon, *vice* Bone.

Lloyd, S. M'V. Staff-Surgeon, from half-pay, to bo Staff-Surgeon, *vice* Hoffman, deceased.

Sanders, H. S., Esq., Staff-Surgeon, to be Surgeon 49th Foot, *vice* Bews.

Scott, J. A., Esq., Staff-Assistant-Surgeon, to be Assistant-Surgeon 70th Foot, *vice* Deakin.
Waters, R., M.D., Staff-Assistant-Surgeon, to be Assistant-Surgeon 21st Foot, *vice* Greer, promoted on the Staff.

Royal Navy. The following appointments have been made:—

Duirs, William, Esq., Surgeon, to the *Princess Royal.*
Fitzgerald, James F., Esq., Acting Assistant-Surgeon, to the *Princess Royal.*
MacLaurie, Henry N., Esq, Assistant-Surgeon, to the *Princess Royal.*

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Elin, George, M.D., to be Surgeon 2nd Administrative Battalion Hertfordshire R.V.
Thorburn, John, M.D., to be Surgeon 4th Manchester R.V.
Tucker, E. E., Esq., to be Assistant-Surgeon 2nd Monmouthshire R.V.

To be Honorary Assistant-Surgeons:—

Cotterell, T. S., Esq., 10th Company Leicestershire R.V.
Robertson, John, Esq., 16th Perthshire R.V.
Rooke, T. M., M.D., 13th Gloucestershire R.V.
Wilson, James, Esq., 5th Banffshire A.V.
Wilson, J. W., Esq., 17th Derbyshire R.V.

DEATHS.

Baly, William, M.D., F.R.S., of Queen Anne Street, Cavendish Square, from an accident on the South Western Railway, on January 28.
Boyd. On January 26, at Orchard, Ayrshire, Isabella Pringle, wife of James Boyd, Esq., formerly Superintending Surgeon, Presidency Division, Indian Navy, Bombay.
Browne, Wm. S., Esq., Surgeon, Camberwell, aged 35, on Jan. 29.
Freer, John B., M.D., of New Brentford, aged 79, on January 18.
Rowe, George R., M.D., at 33, Cavendish Square, aged 69, on January 25.
***Stedman**, James, Esq., of Guildford, aged 73, on January 25.

Prostitution in Naples. Since the 1st of January, prostitution has been taken under official superintendence in Naples. A public dispensary has been opened for the cure of venereal diseases in men; and a special hospital opened for the treatment of prostitutes.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity. This society has just received from Edward Unwin Berry, Esq., residuary legatee and almoner of the charitable distribution of the estate of the late Richard Hall, Esq., of 64, Sloane Street, a donation of £50.

Trials for Illegal Practice. The tribunal of Provins, France, has condemned a somnambulist for having illegally practised medicine, to a fine of fourteen times ten francs, for having fourteen times infringed upon the rights of medicine; to pay the expenses of the process; and to pay two hundred francs damages to the local society of the doctors of the arrondissement of Provins, which had acted as prosecutors.

Boracic Acid in Sea Water. Dr. John Yeatch states, that he has found appreciable quantities of boracic acid, in the form of borate of soda, in the sea water on the coast of California; he found it first in Santa Barbara, and subsequently at various points from San Diego to the Straits of Fuca; the quantity diminished towards the north, being barely perceptible in specimens of water brought from beyond Oregon.

Royal College of Surgeons. The annual course of lectures will be commenced on Tuesday, the 5th inst., by Professor Savory, who will deliver twelve lectures on the Physiology of Food; to be followed by Professor Quekett, who will deliver the same number on the Organs of Digestion; Professor Hilton will conclude the course by giving six lectures in continuation of the subject of the Influence of Rest in the Treatment of Surgical Diseases and Accidents.

British Association for the Advancement of Science. The next meeting of this Association is to be held at Manchester on Wednesday, the 4th of September, under the presidency of Mr. William Fairbairn, F.R.S., President of the Literary and Philosophical Society of Manchester. Among the gentlemen who have consented to act as Vice-Presidents are Lord Stanley, M.P., Sir Sir Philip de Malpas Grey Egerton, Bart., Sir Benjamin Heywood, Bart., Mr. Aspinall Turner, M.P., Mr. Bazley, M.P., and the Bishop of Manchester.

An Offer to the Hospitals. A Mr. Bond, a gentleman connected with the turf in England, has written to the stewards of the Jockey Club, suggesting the setting aside of ten per cent. of the stakes of the Derby, Oaks, and St. Leger, and other races, to be divided amongst six of the principal London hospitals. He generously promises to add a thousand guineas to the first year's percentage, in case the suggestion should be carried out. The percentage on the Derby and Oaks alone would amount to £900 a year.

The Medical Schools. It appears that 1,237 students have registered their attendance this session at the metropolitan schools, being an increase over the number of last session by 132; a corresponding increase has not only taken place in the provincial schools, but also in Scotland and Ireland. There is no doubt that the increase in the medical schools in the United Kingdom is owing to a desire on the part of the students to escape the new regulations of the examining boards, which come into operation with the present year.

Physical Effects of Arsenic. Schmidt and Stürzwage have made experiments on birds and animals, from which they draw the conclusion that arsenious acid introduced into the organism occasions a considerable diminution in the secretion of matter, which explains a fact well known to horse dealers, that horses fatten after the administration of small doses of arsenious acid. That quantity of fat, and of albumen, which corresponds to the depression in the secretion of carbonic acid and urea remains in the body; and if the animal receives adequate nourishment its weight increases.

Weekly Return of Deaths in London. Notwithstanding the late mildness of the weather, the effects of the cold that preceded it are still legible in large characters in the registers of mortality. The number of deaths in London for the week is 1,783, that of the previous week being 1,926. The 1,783 deaths show an excess of 453 over the estimated number. The deaths from diseases of the respiratory organs, exclusive of phthisis, were 702 in the preceding week, and 545 last week. Half of the deaths from bronchitis occurred at sixty years of age and upwards. The deaths from whooping-cough rose last week to 108.

Medical Appointments Vacant. Physician the Western General Dispensary, Marylebone-road; physician to the West Kent Infirmary, Maidstone; house surgeon and secretary to the Denbighshire Infirmary and General Dispensary, Denbigh; resident house surgeon to the Brighton and Hove Lying-in Institution; resident surgeon and dispenser to the Free Dispensary, Henry-street, Portland-town; junior house surgeon to the Northern Hospital Liverpool; assistant surgeon to the Eye Infirmary of University College, London; assistant apothecary to the Leeds Public Dispensary.

Scraps from America. Dr. W. W. Baxley, of Baltimore, at one time connected with the Medical College of Ohio, is about to remove to San Francisco.—Dr. E. S. Cooper, San Francisco, reports the successful removal of an ovarian tumour, weighing eighteen pounds.—Dr. W. H. Mussey reported to the Academy of Medicine, Cincinnati, a case of death in connexion with the administration of sulphuric ether.—Dr. W. Marsden relates (*Brit. Med. Jour.*) the case of a gentleman, residing in Quebec, who was induced to apply for treatment of a cancerous disease of the rectum at the "Magnetic and

Healing Institute, No. 36, Bond Street, New York." The patient died in due course of time, when all the diseased structures were carefully removed at the autopsy, and in the bottle forwarded with the body to the friends, and which purported to contain the specimen, other material was substituted.—Dr. R. B. Bontecou, of Troy, N. Y., performed tracheotomy in a case of diphtheria, the patient living five days after. (*American Med. Times.*)

Crimes of Violence. From judicial statistics lately published on the authority of Mr. Redgrave, it appears that the number of murders, manslaughters, and other violent crimes committed during the last thirty years, divided into three periods of ten years, were 5,731, 7,556, and 8,369; and, if classed under two periods of fifteen years each, 9,506 and 12,150. Arson is a crime almost as detestable as murder; it often causes a terrible destruction of life as well as property. The thirty years divided into two periods show an increase of from 1,340 cases to 2,285; and it may be incidentally said that forgery has increased from 1,516 cases to 2,689, and coining and uttering from 5,603 cases to 8,701, within the same period of thirty years. These results are by no means encouraging, bearing in mind our often alleged progress in morality and civilisation, and bearing in mind, also, the great and undeniable increase in national prosperity. In addition to the figures already given, the statistics show that the commitments for rape, on the abolition of capital punishments in 1841, at once attained a higher rate, and have since been without important change. The increase, however, in the latter period of fifteen years, has been 28·5 per cent.

The Medical Council. In the Court of Queen's Bench, on Thursday week, Mr. Lush obtained a rule calling upon the Branch Medical Council for England to show cause why they should not pay the cost incurred in obtaining a rule against them for a *mandamus*. Mr. Goulden was in practice before August 1st, 1815, and he claimed to have his name entered on the register under the 18th section of the Medical Act, the 20th and 21st Vict., c. 90, which enacted "that any person who was actually practising medicine in England before August 1st, 1815, shall, on the payment of a fee to be fixed by the general council, be entitled to be registered on producing to the registrar of the Branch Medical Council for England, Scotland, or Ireland, a declaration according to the form in schedule B to this act, signed by him, and upon transmitting to such registrar information of his name and address, and endorsing such declaration as aforesaid." The point raised by the defendants was, that the applicant was not of age when he commenced to practise in 1814. The council declined to show cause against the rule, and it was made aboslute for a *mandamus*, which at their request was not sued out, and his name was put upon the register.

Insects in Sores. Dr. Atkinson, Inspector General of Hospitals, writes as follows, on the mode of removing insects from wounds, etc. A little calomel strewed over the part, or blown into the wound from the end of a quill, will immediately rid the patient of them. In the year 1840, during the epidemic yellow fever, a corporal of the 82nd Regiment, during his attack of fever, had a sac of them in front of the right ear, and every application, such as turpentine, tobacco-juice, etc., failed to have any effect upon them. On leaving the hospital at Stoney Hill, I met a very old European woman, who told me that calomel would empty the sac in a few minutes; I returned and tried it, and in less than ten minutes the sac was empty, and had no recurrence of them. In 1848, after the battle of Boom Plaats, over the Orange River, at the Cape of Good Hope, two of the wounded officers, who were shot through the elbow-joint —one a captain in the Cape Mounted Rifles, the other a lieutenant in the 91st Regiment—had maggots; the calomel was blown into the wounds, and in less than ten minutes they were all crawling over the bed, and were swept away, and there was no return of them. I have written this account, as I am not aware that the efficacy of calomel in this affection is generally known."

Treatment of Ringworm. From time immemorial it has been customary to employ various local irritants for the cure of ringworm. Ink is the favourite application of mothers, and is a scientific and frequently successful remedy. At the Hospital for Skin-Diseases, Mr. Startin always blisters the patches with the vesicating fluid. A single blistering is usually sufficient for patches on the skin, but those on the scalp often require two or more. Many surgeons employ nitrate of silver in solid stick. M. Bazin insists strongly on epilation as a means of cure, and there can be no doubt that it is an extremely important one. By removal of the affected and adjacent hairs, we can reduce a ringworm patch on the scalp to the same condition as one of the general surface, thus rendering it much more accessible to the influence of parasiticides. Of the latter it probably does not matter much which we select. The creasote ointment is a very good one, so also is the application of strong acetic acid. The great point in treatment is to keep clearly in mind that the destruction of a vegetable parasite is the object aimed at. It is needless to point out how strongly the fact that ringworm is curable by local means supports the opinions held in this report as to its purely local pathology. (*Mr. Hutchinson.*)

Quacks. The famous quack, Andrew Borde, who gave his name to all future mountebanks, "Merry Andrew", was a practitioner duly licensed, and only, perhaps, a little less regular than his professional contemporaries. The principal oculist to Queen Anne, Sir W. Reade, was a quack, who had originally been a botching tailor; and his colleague and *confrère* in the favour of the same queen, Roger Grant, another quack, had been originally a cobler and tinker, and an Anabaptist preacher. The "water cure," now assumed to be the discovery of the Bohemian peasant, Priessnitz, was put forward, however, in 1723, by a Rev. J. Hancocke, D.D., rector of St. Margaret's, Lothbury, and prebendary of Canterbury, as an original discovery by himself; though Pliny, the naturalist, describes it as being in his day the fashionable remedy in Rome. One of the great quacks of the seventeenth century was a man named Loutherbourg, who, with his wife, professed to cure blindness and every other disease by the mere touch; always, of course, "under God," as they expressed it. They affected to cure gratis; but the tickets, by which alone admission could be obtained to their residence at Hammersmith, were furtively sold at extraordinarily high prices. The bubble in their case eventually burst; but not before the impostors had made a fortune. A famous French quack, Villars, sold a nostrum compounded of Seine river water and nitre, at 5 fr. per phial, and amassed a heap of money. His nostrum, at least, was harmless. Two quack brothers, named Taylor, farriers at Whitworth, in Yorkshire, were so highly regarded as to be called to London to meet the illustrious John Hunter and other physicians in consultation on the case of a person of high rank; and what was more extraordinary still, these ignorant and rude empirics affected to treat all the other doctors, Hunter alone excepted, with profound contempt.

UNIVERSITY OF ST. ANDREW'S: EXAMINATION PAPERS, DECEMBER 1860.

First Examination. First Part. *To be translated into English.* Proximum est, ut de iis dicam, qui partes aliquas corporis imbecillas habent. Cui caput infirmum est, is, si bene concoxerit, leniter perfricare id mane manibus suis debet; numquam id, si fieri potest, veste velare; ad cutem tonderi; utileque lunam vitare, maximeque ante ipsum lunæ solisque concursum; sed nusquam post cibum progredi. Si cui capilli sunt eos quotidie pectere; multum ambulare, sed, si licet, neque sub tecto, neque in sole; utique autem vitare solis ardorem, maximeque post cibum et vinum; potius ungi, quam lavari: nunquam ad flammam ungi, interdum ad prunam. Si in balneum venit, sub veste primum paulum in tepidario insudare, ibi ungi, tum transire in calidarium; ubi sudarit, in solium non descendere, sed multa calida aqua per caput se totum perfundere, tum tepida, deinde frigida; diutiusque ea caput, quam cæteras partes perfundere; deinde id aliquamdiu perfricare: novissime detergere et ungere. Give the origin or primary meaning of the following words: Artery, Azote, Diastole, Lethargy, Masseter, Paralysis, Sinapism, Strangury, Trochanter, Zygoma. *Second Part. Chemistry.* 1. What do you understand by specific gravity? Describe the methods of ascertaining the specific gravities of solids, liquids and gases. 2. Give the process for the preparation of phosphorus; describe it; and enumerate the parts of the human body in which it is found in combination. 3. Write, in formulæ, the composition of the following substances:—red precipitate, borax, prussiate of potass, cream of tartar, oxalic acid; and state how the last two are obtained.

Second Examination. *Anatomy and Physiology.* 1. Describe the ligaments connecting the first two cervical vertebræ with each other and with the occipital bone; and the muscles passing from each of these bones to the other two. 2. Describe the Cœliac axis and is branches. 3. Describe the position and boundaries of the lateral ventricles of the brain. What is known either from experiments on living animals, or from clinical observations, regarding the functions of the different parts of the brain? 4. Is the circulation of the blood in the capillaries influenced by any other agency than the contractile power of the heart and arterial system? What is known regarding the rate of movement of the blood in the arteries, capillaries, and veins; and regarding the force with which the blood is propelled from the left ventricle?

Third Examination. First Part. *Materia Medica.* 1. What are the principal arguments in favour of and in opposition to general blood-ietting in acute inflammatory affections? 2. In what morbid conditions should wine and spirits be administered medicinally? What are the best indications for their administration in cases of fever? 3. State what you know regarding the therapeutic uses of electricity in its various forms. 4. How is oil of turpentine obtained? What is its action on the animal economy (1) in small doses, (2) in comparatively large doses, and (3) when applied externally? What are its chief uses in medicine? Write a Latin prescription, without using symbols or abbreviations, for a draught suitable for a case in which you would use it. *Second Part.* N.B. In answering the practical questions, the Examiners require every candidate to specify the mode of treatment which he is in the habit of adopting, and the doses of medicines which he prescribes. *Practice of Medicine.* 1. State the principal facts, so far as you know them, which show that impure drinking-water may cause disease. What diseases have been stated to be so produced, and what are the means to be adopted when epidemic disease is due to such a cause? 2. What are the remaining characters of a urinary sediment which is thrown down in a highly acid urine, in the form of colourless crystals soluble in the mineral acids? What forms of disease are frequently associated with this deposit? and what are the remedies to be employed? 3. Describe simple acute laryngitis, mention the diseases with which it is apt to be confounded, and give a short statement of the treatment. 4. Give the physical signs of pericardial fluid effusion, so as to distinguish this affection from others producing dull percussion of the præcordial region. 5. A man accustomed to active exercise, and pretty free living, is induced to apply for medical advice by finding that he is unable to walk rapidly or far without painful breathlessness, and a sensation of sinking, to which vomiting is often superadded. He has also a little cough, and has once or twice expectorated blood. On auscultation, a murmur is discovered with the second sound of the heart at mid-sternum, and over the base. The pulse is soft, but full and bounding; the murmur is audible in the carotids; the heart's impulse is increased. What is the disease? Remark upon its probable causes and on the prognosis. 6. A child of two years old becomes fretful, shivers, and is feverish, pulse being 120 to 130. For twenty-four hours there is painful sickness, and the epigastrium is tender. During the next twenty-four hours there are one or two violent convulsions. On the third day all the symptoms are greatly relieved, and there is a crop of disseminated red acuminated papules on the skin. What is the disease, and what will be its probable course from this period?

Fourth Examination. First Part. *Surgery.* Describe the various methods of arresting hæmorrhage, arterial and venous. 2. Describe the principal kinds of ulcer, and the treatment of each. 3. Describe the symptoms and treatment of rupture of the bladder and urethra. 4. A patient has a deep abscess pointing at the groin. What probably would be the other symptoms, and the prognosis and treatment? Second Part. *Midwifery.* 1. Describe the phenomena of the second stage of labour in an occipito-posterior position. 2. What signs of pregnancy are available in the end of the third month of utero-gestation? 3. On the *post-mortem* examination of a woman dying during menstruation, what is observed? 4. After a fortnight of undefined illness, A. B., aged 6 years, complains of headache, is often sick and vomits, has constipated bowels, is somnolent, but the sleep is disturbed. What is probably the disease, and what its probable progress? 5. During a labour difficult in the second stage, sudden abdominal fixed pain comes on, there is great collapse, the labour-pains cease, vomiting of dark-coloured fluid matter begins, and on a vaginal examination the presenting head is found to have somewhat retired while a little hæmorrhage at the same time flows. What is the nature of the case, and its probable progress?

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.
Friday. ...... Westminster Ophthalmic, 1·30 p.m.
Saturday.....St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Entomological, 8 p.m.—Epidemiological, 8 p.m.—Odontological, 8 p.m.—Medical, 8·30 p.m.: Clinical Discussion.
Tuesday. Pathological, 8 p.m.—Photographical (Anniversary).
Wednesday. Society of Arts.—Geological.—Pharmaceutical, 8.30. p.m.—Ethnological.—Obstetrical, 8 p.m.: Dr. Tyler Smith, "On Ovariotomy, with Cases; Dr. Madge, "On a Case of Periuterine Hæmatocele."
Thursday. Zoological, 4 p.m.—Royal.—Antiquarian.—Linnæan, 8 p.m.—Chemical, 8 p.m.—Harveian, 8 p.m.: Dr. Polloek, "On what we know of Phthisis, regarding its Cure."
Friday. Astronomical (Anniversary).—Royal Institution.—Western Medical and Surgical, 8 p.m.
Saturday. Asiatic.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

Inflammation and Blisters.—Sir: Mr. Simon, in an article on Inflammation, just published, says, in a note:—"Dr. Greenhow informs the writer that it happened to him once, in making the *post mortem* examination of a patient, to whose abdomen a blister had been applied, to find on the inner surface of the abdomimal wall *a red patch* (probably of some injected muscular substance seen through the peritoneum), corresponding to the area of blistered skin." I read of a similar observation to this, in the case of the pleura, many years ago, and have often attempted to find the source where I got the fact. I take this opportunity of asking the question of your readers, and should feel much obliged by an answer. As far as I remember, the physician (I think) who relates the fact, speaks of a patch of inflamed pleura exactly equal in area to a blister applied externally on the skin, and also mentions the fact, to warn the student against the use of blisters in acute inflammations. Yours, etc.,

Pathologist.

E. L. A.—Some curious individual, who signs himself E. L. A. "claims almost as a right", that we should insert his opinions of a Reverend Impostor, who is at present very busy robbing the public, torturing the ignorant, and filling his own pockets, and doing this all for the benefit of humanity in general! This E. L. A. can surely be contented to admire this great benefactor of his species in quiet, without troubling men of knowledge with his unreasoning expressions of admiration for the object of his eulogistics.

G. Arator.—The *Australian Medical Journal* is published quarterly at Melbourne; the *Indian Lancet* at Lahore. Each of these contains a large amount of local intelligence.

Chloroform in Midwifery.—Sir: In one of the zig-zag *feuilletons* of the French medical journals, *L'Union Médicale*, of last month, a solemn surgeon states it as a fact that, a female patient of his about to have chloroform recently, in Paris, the operating surgeon left word that a *garçon* should be procured to administer the anæsthetic, and a "piston apparatus", so much in vogue in London medical journals about a year ago as infallible as chlorodyne, should be borrowed at a shop of a *pharmacien*. The French are nothing if not dramatic and shadowy; so several pages are taken up with a spasmodic description of the lady to be operated on coming to consult him (the *feuilletonist*) whether there is any danger in chloroform: he tells her the danger is exactly like that of a woman or a man going up in a balloon, once the cords are cut. As she is going away, she accidentally shows him a *cornet-à-piston* which she has procured, and thinks this will answer for the administration of the chloroform; at least, the chemist's assistant did not know of anything better, and had sent it. This seemed to puzzle our *feuilleton* friend as much as the "barbara celarent darii", etc., in the syllogistic logic of Mill, disquieted long ago Molière's hero (adopted by Dr. Latham in one of our new year's medical quarterlies); but the story is a good one, as having actually occurred, and one is irresistibly urged to inquire how far beyond this chemist's assistant some of our more grave theoretic pen-and-ink public instructors in London have got, at least in the uses of chloroform in midwifery practice.

It was stated by the latter, in a recent debate at the Obstetrical Society, a short abstract of which appeared in the British Medical Journal, that chloroform is not desirable or useful in cases of "version", or turning, or convulsions. It did not appear, however, that Professor Simpson has no doubt whatever of its immense value in all such cases; that all the practical accoucheurs in England are clear on these points; and that Dr. McClintock, of the largest lying-in hospital in Europe (Dublin), stated that he now never proceeds to "turn", in a case requiring it, without taking care to have chloroform first administered. The old routine theoretic opposition to chloroform in one section of the medical press in London is doing immense mischief; the actual facts are carefully suppressed. Our only hope is in your excellent and independent Journal allowing a fair discussion of this important subject, and thus prevent *cornet-à-piston* mistakes.

I am, etc., C. K.

Sackville Street, Jan. 12, 1861.

Dr. Keill.—Sir: I am obliged by the interesting answers given by your correspondents, to my query concerning Dr. Keill. One curious incidental fact comes out of those answers, which is well worthy of an explanation. It is this: How comes it that a physician living in the midland district of England publishes a work at Amsterdam? Must we suppose that in those days medical publishers were unknown individuals in the large metropolis?

Yours, etc., Northamptonensis.

Universities *v.* Colleges.—Sir: Your remarks in the British Medical Journal of this day on the subject of the M.D. question *versus* Colleges-of-Physicians-Drs., read to me as though you thought the King and Queen's College of Physicians in Ireland imagined the *general* question between Universities and Colleges of Physicians settled by the law opinions they have obtained. I am greatly mistaken if you will not find on examination that they claim a *sole* and *special* power, among Colleges of Physicians, of granting the title of "Doctor of Physic" by virtue of a *special* clause in their own Charter, not found in that of any other College of Physicians. Yours, etc., T. P.

[What we desired to express was this: that the fact of one College of Physicians actually possessing and having asserted the *legal* right of granting the Doctorate to its Licentiates, would, in combination with the fact of the now very generally *assumed* right of taking it by Licentiates of other Colleges—strengthen, and add a kind of implicit sanction to, the practice, however out of order it may be.—Editor.]

In reference to this subject, another correspondent writes:—"The power to confer the title of M.D., vested, as you contend, solely in the Universities, was derived from the same source as was the privilege accorded to the King and Queen's College of Physicians in Ireland, *i.e.*, from royal charters and Acts of Parliament. As a Licentiate of the College, I beg to remark that the power to grant the degree of M.D. has always been claimed by the President and Fellows."

Medico-Chemicus.—We are decidedly of opinion that the office of public analyst should be held by medical men. The Act provides that this officer shall be possessed of "competent medical, chemical, and microscopical knowledge." Now, although there is no direct mention of a legally qualified practitioner, yet the meaning of the Act is to us plain enough: and we are borne out in our opinion by the fact that hitherto (as we believe) all the appointments of analysts made under the Adulteration Act have been conferred on medical men who possess a competent share of chemical and microscopical knowledge.

One of the Rejected.—A correspondent, signing himself "One of the Rejected", demands the insertion of an anonymous letter of his, in which he accuses a Scotch University of "dishonesty", "barefaced robbery", and gross corruption. His letter is libellous. Unless we insert the libel, he says he will retire from the Association. All we can say, in answer to the threat, is this:—That if the gentleman will write a temperate account of his alleged grievances against the aforesaid University, and will authenticate the same with his name, his letter shall be inserted. As we have already told him, we believe that no one more than he himself would eventually regret the publication of such a letter as that which he sent us some weeks ago.

COMMUNICATIONS have been received from:—Dr. P. H. Williams; Dr. B. W. Richardson; Mr. Price; Dr. Jas. Russell; Mr. T. M. Stone; Mr. R. Griffin; Dr. Chambers; Dr. Beale; Mr. G. A. Dartnell; Dr. Priestley; Dr. West; Mr. Hutchinson; Dr. Inman; Mr. Dayman; Mr. Roper; One of the Rejected; and Dr. Falshaw.

BOOKS RECEIVED.

1. How to Work with the Microscope. Illustrated edition. By *Lionel Beale, M.B., F.R.S. London: Churchill. 1860.
2. Practical Observations on Diseases of the Joints, involving Anchylosis; and on the Treatment for the Restoration of Motion. By *Bernard E. Brodhurst, F.R.C.S. Third edition. London: Churchill. 1860.

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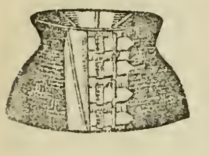

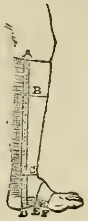

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Two Lectures

INTRODUCTORY TO THE CLINICAL COURSE ON

THE DISEASES OF WOMEN AND CHILDREN.

DELIVERED AT THE MIDDLESEX HOSPITAL.

BY
WILLIAM O. PRIESTLEY, M.D.,
PHYSICIAN-ACCOUCHEUR TO THE HOSPITAL, AND LECTURER ON MIDWIFERY IN THE COLLEGE.

Lecture I.

Gentlemen,—Although the value of clinical teaching has been fully recognised in medicine and surgery, no adequate provision has yet been made in the various medical schools for clinical instruction in the obstetric department of the profession. Every general practitioner finds that at least one-half his patients are women and young children, and his skill and energies are constantly taxed by the emergencies of midwifery practice; yet, because no obstetric clinical instruction has been required by the examining boards, none has been instituted by the schools generally.

The councils of the two most eminent medical corporations having for a long period consisted almost exclusively of physicians and surgeons who did not practice midwifery, and who were therefore inclined to underrate its importance, have allowed the requirements in obstetric medicine to fall far behind those in medicine and surgery. The College of Surgeons, without insuring any improvement in the practical teaching of midwifery, some time ago reduced the systematic lectures on this subject from a course of six months to one of three months; and it is obviously impossible in so short a time to teach the diseases of women and children, as well as the principles and practice of midwifery. As I believe it to be the duty of the medical teacher to see that the regulations of examining bodies do not form the measure of his efforts for the welfare of his pupils, more particularly if those regulations are defective, I propose to follow the example of the physicians and surgeons, and to give a series of clinical lessons on the various Diseases of Women and Children, as cases occur in the hospital. I hope in this way to supplement the short summer course of midwifery, and may possibly be enabled to give some hints which will be serviceable in your future practice.

As introductory to the study of diseases peculiar to women and infants, I will first briefly draw your attention to some of the leading characteristics belonging to the two classes of patients, which exert a marked influence in the production and progress of the morbid affections to which they are liable; I will then point out some of the principal difficulties you may expect to encounter in investigating their diseases.

From certain structural and physiological peculiarities possessed by women and children, they are subject to various diseases, specially their own. They are liable, however, to be attacked by some maladies in common with adult males; but it is well ascertained that, when they are so attacked, the common disease will, in accordance with the age and sex of the patient, be modified in its course, be attended by other symptoms and complications, and perhaps terminate differently in each case.

The pathological anatomy in women and children differs also remarkably from that of other patients. Special modes of diagnosis have to be employed in investigating their ailments, and special therapeutics employed in their treatment.

In children, the processes of nutrition and growth are much more active than in adults of either sex. Not only does assimilation of materials from without go on for the purpose of supplying the waste which organs suffer in the performance of their functions, and of preventing atrophy of tissues already existing, but the progress of growth is going on so rapidly in every part of the body, that a greatly increased activity in the function of nutrition is demanded, and changes in integral parts go on much more rapidly. In accordance with this, assimilation, respiration, and the circulation of the blood, go on at a much quicker pace in infancy and childhood, and the reproductive power of the various tissues is greater than in adults. Injuries, if they be not too deep or too extensive, are more easily repaired, and generally more perfectly. A broken limb, if properly treated, is sound and well in half the time necessary for the cure of a like injury in an adult; and the rapidity with which young patients recover after severe attacks of acute disease, is proverbial.

As a rule, it may be stated that the younger the subject, the higher is the reparative power. During fœtal life, which is only one step anterior to infancy, the capability of regeneration of parts almost reminds one of the remarkable capability for repairing injuries observed in some of the invertebrated animals. As, in a crab, the claw will be reproduced which has been torn off by some accident; so in the fœtus before birth, attempts are repeatedly made to reproduce a limb which has been severed from the body by some accident or disease. Instances of what have been denominated intrauterine amputation have been put on record, where, in the neighbourhood of the cicatrix left as the result of spontaneous amputation *in utero*, minute fingers, each provided with a well formed nail, were found engrafted on the stump, giving undoubted evidence of an imperfect attempt to reproduce the limb which had been lost, and thus repair the injury.

But because the nutritive function is so active and the vegetative function so remarkable in the young, the progress of disease, when once commenced, is much more rapid than in those who have reached the age of maturity. Let once the nutrition in any part or organ deviate from a healthy to a morbid process, and, because it goes on speedily for a wholesome purpose in health, it advances rapidly towards death in disease. It is well established that inflammatory affections are more frequent in children than adults; that they are more generally acute in character, and run through their various stages more speedily. Medical treatment, to avail anything, must keep pace with its progress, and be prompt and active. If you wish to be of essential service to your little patient, you cannot, as a rule, put off your visits from one day to another, as is commonly done in the case of adults. Your visits must be frequent, in order that you may be able to observe the rapid and varying changes which take place in the progress of the disease, and suitably provide for the various contingencies which succeed each other.

A case of croup, for example, may run through its various phases very rapidly. In the course of a few hours, active inflammation may produce so thick and extensive an exudation in the trachea that air cannot be admitted to the lungs, and the child dies of apnœa. The disease, therefore, to be combated successfully, must be met at the outset, and attacked vigorously, but yet prudently; and you may be much more hopeful of recovery if you recognise the true character of the disease early, and are prepared to meet it by proper remedies.

Further, it deserves to be borne in mind that the effects of disease in young children are not limited to the period during which the attack is present, but often have a remote effect throughout the life of the individual. The injury it inflicts on the young and tender frame is necessarily deep, because when acute disease is present the action is intense and the progress rapid; so that, notwithstanding the great power of reparation possessed by the tissues, the ravages are so wide-spread and the disorganisation so great that permanent injury is inflicted, and some organ important in the economy is crippled in its function during the rest of the life of the patient. But this is not all; perhaps the organ so crippled in function is one which, under natural conditions, exerts a controlling and co-ordinating influence over nutrition in other parts of the body, and then the evil is not limited to the organ immediately implicated, but its effects are apparent in the impaired nutrition of the rest of the body. These remarks apply to some acute diseases of the nervous system in young children, and particularly to acute hydrocephalus. Recoveries from this disease are not frequent; but if life is preserved, it probably results that the rest of the body is injured in its development, and perhaps the mind itself is permanently weakened.

Young children are more susceptible to external influences than those of mature years. They have less power of resistance to cold and other depressing agencies than older people, and suffer far more seriously from bad hygienic arrangements and deficient or improper food. These are peculiarities in the infantile constitution which are not sufficiently impressed on the minds of parents, whether they be poor or belong to the better educated classes; and they are apt to be less regarded by medical men than they deserve to be. The fashion of dressing children in this variable climate, and especially in cold weather, so that the extremities and a considerable portion of the body are exposed, from an erroneous idea that it is both comely and wholesome, is perilous in the extreme. The doctrine of "hardening" children, as it is called, by exposure to cold, is opposed both to the dictates of science and of common sense, and, put in practice, is a fertile source of disease. It seems absurd, indeed, that when the lowness of the temperature obliges parents to cover their bodies and lower limbs with warmer clothing, no such precautions should be thought necessary for their young offspring, whose bodies are much less able to resist a low temperature, and to whom warmth is one of the requisites for the preservation of health! I am often tempted to suggest to mothers who clothe their children in this injudicious way, that they should try a like exposure of their own bodies to the inclemencies of the weather. Without doubt, the deleterious effects on the health of the parents would be less than on the health of their children.

Again, to keep up the process of healthy nutrition in those of tender years, a suitable diet is imperatively required; and the younger the child, the more important is it that its diet should be carefully attended to. My impression is that the ailments of two-thirds of the infants under a year old, who are brought for advice to the out-patients' room of the hospital, are induced by improper feeding; and a large proportion of disease in those who are older arises from the same cause.

It is a wide-spread and deep-rooted fallacy that the various forms of farinaceous food are more nutritious and digestible for infants than milk diet. If, from any cause, a mother is unable to wet-nurse her own child, instead of supplying it with the best substitute—the milk of the cow or some other animal, which contains all the necessary elements for nutrition, in a form which approximates nearest to its natural food—the poor child is fed on biscuits moistened with water, on arrow-root, sago, or some other of the farinaceous series. The result is that atrophy in all the tissues of the body commences, enlargement of the mesenteric and lymphatic glands accompanies it, and at length diarrhœa, or some acute visceral disease, carries off the wretched little starveling.

Proper ventilation and exposure to air and light are also equally necessary to young children as to plants, and without these they wither and die.

I dwell on these details, because every minute particular which has any bearing or influence on the health of young children well deserves the attention of the medical man; and it is quite certain that he who is not familiar with the conditions for health in any class of patients is not competent to prescribe for their diseases. It is one of the triumphs of medical science that during late years infantile mortality has been gradually diminished; but you will understand much remains yet to be achieved in this direction, when I tell you that even in our day it is computed, that *one child out of every five born dies within the first year, and one in three before the completion of the fifth year.* As the intelligence of parents increases, and they become better acquainted with the necessary conditions for preserving the health of their offspring, there can be little doubt that infantile mortality will still further lessen; and it is the duty of every conscientious medical man to do what he can to diminish this preventable mortality.

Having relation to the physiological peculiarities I have pointed out, a special pathology runs through the whole range of infantile diseases. Acute inflammatory affections of the organs which subserve the functions of innervation, respiration, and digestion, and chronic diseases of the lymphatic glands and skin, are proportionally very frequent. Acute inflammation of the brain, or acute hydrocephalus, is almost exclusively a disease of infancy, a fact which finds its explanation in the rapid development which this organ undergoes in the early years of life, compared with what takes place subsequently. Inflammatory affections of the lungs are even more frequent and fatal than inflammatory diseases of the brain; and several reasons may be adduced to account for this. In the first place, the number of respirations in a young child is almost three to one as frequent as in the adult; while the pulsations of the heart, with which the process of respiration is so closely associated, count commonly above 100 in the minute in the child, and not more than 75 or 80 in the adult. Added to these is the extreme sensitiveness of the mucous membrane lining the air-passages, which is constantly exposed to the effects of external agencies; and, lastly, the peculiar sympathy which exists between the respiratory mucous membrane and the mucous membrane of the alimentary canal, the latter being seldom deranged without some secondary implication of the former.

The local peculiarities which predispose the alimentary canal to inflammatory attacks are probably to be found in the delicate organisation of its mucous membrane, the constant liability which it suffers to be injured by the presence of improper food, and its active sympathy with other parts, particularly the skin.

The lymphatic and mesenteric glands in children, because they are most actively employed in carrying on the function of absorption and nutrition, are readily affected by disease; and, if nutrition is impaired, they become the seat of tubercular deposit. The skin, also, because its function is exalted while its structure is delicate, more readily takes on morbid processes.

Looking still further into the peculiarities of infantile pathology, we learn that there are certain diseases belonging to the first years of life, and rarely or never occurring in adult age. Hooping-cough and measles, with other exanthemata, are more particularly diseases of childhood, because the *materies morbi* of these affections is very subtle, and few individuals live through the period of infancy without being exposed to their infection; but there are diseases which are associated only with the period of development, and therefore essentially belonging to children. Rickets, for instance, is a morbid condition of the bones arising from a deficiency of the earthy constituents during growth, and which results in bending and deformity. The fact that this affection only occurs during early life is of great importance in an obstetric point of view. The midwifery practitioner, attending a patient who has been deformed by rickets, can confidently rely on no increase in the contraction of the pelvis taking place between one delivery and another. But the case is quite otherwise if osseous deformity is the result of mollities ossium. This is a disease of the bones belonging to adult age, and pelvic contraction may increase progressively between each pregnancy.

To some diseases which are common enough in advanced life, young children are in a measure or altogether exempt. Acute rheumatism is not frequent in infants, and gout is very rare before the period of puberty. Carcinoma, granular degeneration of the kidney, and atheromatous disease of the cardiac valves and arteries, are also affections not likely to be met with, as they belong essentially to adult or declining life.

One of the most remarkable features, however, in infantile pathology, is the extensive and deep sympathy which exists between the several organs of the body. The nervous connexion between the various parts is so intimate, and the conducting cords are so sensitive, that disease can scarcely be present in any one organ without involving others, near and distant, in the disarrangement. Often, the sympathetic disturbance of some organ not implicated in the original disorder is so great that it entirely masks the true malady, and, without great care, may entirely mislead the practitioner. For example, one of the earliest symptoms which commonly attends the invasion of acute hydrocephalus is an irritability of the stomach that prevents its retaining the usual ingesta. If you overlook the significance of this sickness in such a case, and prescribe merely for the stomachic derangement, you fall into a grievous error, and lose any chance you may have of combating the cerebral disease before it has made such progress that treatment is useless.

During the periods of the first and second dentition in children, there is a much greater proclivity to the development of disease than at other times; and it is then we see so well marked that curious morbid sympathy between the various organs to which I have just alluded. It is evident that, at these critical periods of infancy, some notable change is taking place in the entire system; a leap, so to speak, is being made in physiological development; and the nervous system, for the time being, is supersensitive, resenting slight injuries, and causing sources of irritation which generally would produce little disturbance, to give rise to grave maladies. Convulsions, and other forms of nervous disease, are especially frequent about the periods of dentition; and children of excitable temperament and delicate organisation, even if they escape graver affections, seldom pass over these critical periods without disturbance of a less serious character.

The *diagnosis* of the diseases of children is attended by many difficulties, and it requires great care and perseverance to overcome them. The infant cannot tell you where its pain is; or, if it is old enough to speak, it knows not how to define its suffering. Because you are a stranger, it regards you probably with suspicion, and shrinks from anything you may attempt in the way of physical examination. If you take its hand, it draws it suddenly away; if you endeavour to auscultate its chest or look at its tongue, it struggles to get free; or, rendered peevish by its illness, it bursts into such an uncontrollable fit of crying as effectually frustrates all your efforts to ascertain its true condition. Investigating children's diseases in the same way as you do those of adults, you will be entirely at fault; for the usual modes of diagnosis cannot be adopted here. Dr. West has remarked that, to the uninitiated practitioner, the study of children's diseases may be compared to learning a new language, or to entering a country where the manners and customs are entirely different to any seen before. I believe, nevertheless, that the difficulties besetting the investigation of disease in children are much exaggerated in the minds of students, and are readily to be overcome by the exercise of discretion, earnestness, and gentleness. The student must be content to learn first the rudiments of that language in which children express their ease or pain, satisfaction or sorrow; but when these are once mastered, every sign has its meaning, and every movement its significance. The language cannot be acquired all at once, but step by step, as everything else is learned; and if to diligence be added a genuine interest and love for children, the task will be all the easier. Little patients intuitively discover who are their friends, and soon yield themselves in passive obedience.

In seeing a young child in the ward or out-patient room of the hospital, do not at once alarm your little patient by precipitate examination, but take time to watch the colour and expression of its countenance, its respiration, and general physical condition, while you talk with its mother, and its attention is directed away from you. You will thus achieve the first steps in your diagnosis. Then, having some object at hand, as a bunch of keys or a paper-cutter, you make friends with and amuse it, while you ascertain the condition of the skin, the frequency of the pulse, and the state of the abdomen or fontanelles, as the case may be. It is well to do all this when the child is quiet; and therefore you avoid putting your finger into its mouth, or listening to its chest, until all other information is gained, as these can seldom be attempted without some resistance. Having completed your examination, you have then only to put the proper construction on the facts you have elicited.

For further information on these points, I would recommend you all to read the first lecture in Dr. West's admirable book on the *Diseases of Infancy and Childhood*. There you will learn, as far as a book can teach you, how to encounter the various difficulties in investigating the maladies of young children; and there you will find directions for diagnosis in greater detail, and given in all respects far better than I can hope to give them to you.

Original Communications.

THE STRUCTURE AND GROWTH OF TISSUES:

A SHORT ACCOUNT OF THE CONCLUSIONS DERIVED FROM SOME NEW OBSERVATIONS WITH THE HIGHEST MAGNIFYING POWERS.

By LIONEL S. BEALE, M.B., F.R.S.,
PROFESSOR OF PHYSIOLOGY AND OF GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; PHYSICIAN TO KING'S COLLEGE HOSPITAL; HONORARY FELLOW OF KING'S COLLEGE; ETC.

[*Continued from p.* 110.]

II.—Of the Cell Theory. Professor Huxley's Views. Cell-Wall. Cell-Contents. Nuclei and Nucleoli. Germinal Matter. Formed Material. Of the Powers of Germinal Matter.

We must not look upon the component parts of tissues as fixed and stationary structures, which may exert an influence upon certain substances coming into contact with them, without themselves undergoing change; neither can the arrangement of these component parts be compared to that of bricks in a wall or a tessellated pavement; nor does their formation at all resemble the process of crystallisation or the precipitation of inorganic particles from a fluid in which they had been previously dissolved. The *germinal matter* of each component part may be regarded as consisting of particles, from each one of which endless growth may proceed as from centres, and the *formed material* external to it, as possessing peculiarities depending upon the powers of the particles of germinal matter of which it consisted at an earlier period of its existence, but no longer capable of multiplication—no longer able to animate lifeless particles. Every particle, then, of every elementary part, like every tissue and organ composed of these, and every living organism, passes through certain phases of existence in a definite order, moves in a definite direction, retains for a time certain peculiar properties, is at last resolved into substances of a simpler composition, and is removed to give place to particles which are ready to succeed it. The peculiar powers which it has manifested during its existence were inherited from its predecessors, which possessed similar powers; and these will be transmitted to those which succeed it.

The Cell Theory. Professor Huxley's Views. The general view entertained on this matter is the one which was brought forward by Schleiden and Schwann, who supposed that little bodies (nuclei) made their appearance in a blastema, and that an investment (cell-wall) was afterwards formed around them. Through this wall fluids passed in and out, and their composition and characters were modified while they formed part of the contents of the cell. Each cell was regarded as a centre to organisation.

On the other hand, Professor Huxley was led to adopt, with some important modifications, Wolff's view, which supposed that tissues exist originally as a transparent viscous mass, in which cavities are developed. These become the cells and vessels, and their walls may be thickened by deposits from the solidescible nutritive fluid. All within each space Professor Huxley terms the *endoplast;* while the walls of the spaces and intervening material are called *periplasts* or *periplastic substance*. In the latter substance, he considers, the most important changest ake place. In this substance, fibrillation and vacuolation occur; and, "by its differentiation, every variety of tissue is produced". This differentiation is the result "of intimate molecular changes occurring in its substance, which take place under the guidance of the *vis essentialis*, or, to use a strictly positive phrase, occur in a definite order, we know not why." (*Med.-Chir. Review*, vol. xii, 1853.)

The view to which I have been led is essentially different from either of these. So far from the cell-wall being built up around the nucleus, I maintain that it results from changes in, and the coalescence of, the oldest particles of a mass of germinal matter (nucleus). New nuclei may make their appearance in this germinal matter; and, at a later period, these may become active, and new ones may appear within them; and so on infinitely, if the mass be placed under circumstances favourable to its growth.

The *periplast* of Professor Huxley corresponds to my *formed material*—that is, to the cell-wall of the vegetable cell, to the matrix of cartilage, to the fibrillated structure of fibrous tissue, etc. So far from attributing to this structure active properties, I hold that matter, when it assumes this form, no longer possesses formative power, or power of growth or reproduction. It may become infiltrated with various substances, thickened by deposits, or altered by the action of various agents; but it is no longer capable of causing or producing change by its own powers. I do not regard this material (cell-wall, intercellular substance, periplast) as a product of secretion of the contents of the cell, but I believe it results from the alterations taking place in the particles while they possessed active vital properties, by virtue of a power which they derived from their predecessors, in obedience to which they always move in a direction from centre to circumference.

It would be almost impossible, without going too much into detail, to indicate in various living structures the parts which exactly correspond to the names which have been usually employed in the description of those structures which are generally appealed to for examples. I propose, therefore, only to express my views with reference to these parts in general terms. Their exact nature will be more fully discussed when the growth of the different tissues is described.

Cell-Wall, Cell-Contents, Nuclei, Nucleoli. In many cases, the so-called cell-wall, cell-contents, nucleus, and nucleolus, can be demonstrated; but often the cell-wall is seen to pass gradually into the cell-contents. The nucleus is not always present, while sometimes there are many nuclei. The nucleoli are by no means constant. Cell-walls have been described by some writers in structures in which others have failed to demonstrate them; and we know that, in many of the lowest animals, the living tissue is not inclosed in any membrane at all. The greatest confusion, too, prevails as to whether certain appearances result from the presence of *nuclei* or *cells*, or are due to mere *spaces* in the interstices of a tissue; whether an organism is to be looked upon as a single cell inclosing other cells or nulcei, or as a compound body composed of several cells; and there are many other difficulties in our existing nomenclature which render it impossible for me to describe by its aid various points which I have observed. I propose, therefore, to use the more general term *elementary part* (often but not always corresponding to the term cell), composed of *germinal matter* and *formed material.*

Germinal Matter; Formed Material. I regard the *nucleus* as consisting of germinal matter in a comparatively quiescent state—in a state of dormant vitality, but ready to burst into active existence the instant the conditions necessary for its development are present; the *nucleolus*, as germinal matter another series removed from the nucleus, excepting, of course, in those cases in which the so-called nucleolus consists only of a particle of oil set free in or upon the nucleus.

The *germinal matter*, undergoing active changes which end in the particles being resolved into *formed material*, is in a state of vital activity, and passes through changes very rapidly, compared with the nucleus, which as yet has not commenced the active period of its existence.

The *formed material* is the result of the series of changes occurring in the particles of germinal matter, and may be firm and fixed in composition, exhibiting structure like fibrous tissue; infiltrated with calcareous matter, as bone; firm, exhibiting no indications of structure about to undergo change, and even capable of assuming a crystalline form, like the red blood-corpuscle; soft, transparent, and viscid, like mucus; or the formed material may be combined with much fluid, as bile.

The cell-wall is not a constant structure, and it and the so-called intercellular substance may be represented by a fluid. The formed material is sometimes very readily affected by certain external conditions, and its state is much influenced by the nature of the fluid which bathes it. It is easily destroyed by living structures which may grow at its expense. The germinal matter possesses an inherent power of resisting to a certain extent the action of destructive agents; but conditions which would certainly destroy it do not affect the vitality either of the nucleus or nucleolus.

The *formed material* is not coloured by alkaline colouring matters (carmine, litmus); the germinal matter in an active state is most distinctly coloured. The nucleus and nucleolus are intensely coloured, although in many cases these structures are separated from the colouring matter by a considerable thickness of formed material. If the latter be stained, the colour may be removed by fluids which exert no influence on the colour of the germinal matter.

Many circumstances lead me to the conclusion that germinal matter possesses an acid reaction, and I have not yet been able to discover any facts which militate against this conclusion.

[*To be continued.*]

REMARKS ON OBSTRUCTION OF THE BOWELS: WITH CASES.

By Edward Copeman, M.D., M.R.C.P., F.R.C.S., Physician to the Norfolk and Norwich Hospital.

[*Continued from page 114.*]

Case xxvi. *Impaction: Recovery.* September 12th, 1856. Mr. —, aged 60, was attacked several days ago with pain in the abdomen, beginning in the centre, and then fixing itself in the region of the ileo-cæcal valve, where there is a decided fulness as if from impacted fæcal matter. He has been treated actively with leeches, blister, calomel and opium, and various purgatives. These produced free *liquid* evacuations, but the abdomen is still much distended, the bowels flatulent, with a threatening of a return of pain; furred tongue, and turbid urine. I advised a large warm poultice to the abdomen, and three grains of scammony in a pill every morning; also an ounce of compound decoction of aloes, and a drachm of tincture of hops twice a day, and a mixture, containing tincture of sumbul and ammonia, to be taken occasionally for pain or flatulence.

The pills acted very satisfactorily, bringing away *easily* considerable quantities of hard lumpy fæcal matter; and the patient soon lost all feeling of ill health.

Case xxvii. *Constipation: Amenorrhœa: Recovery.* B., aged 17, was admitted into the Norfolk and Norwich Hospital on January 12th, 1855; having for some time previously lived in service, and been under medical attendance. The catamenia had been absent for several months. She has been subject to most obstinate constipation, the bowels remaining unmoved for ten days or a fortnight at a time. She also states she is frequently unable to pass urine for two or three days together, and has passed none since her admission yesterday. In addition to these symptoms, especially when the constipation has been prolonged, she is troubled with vomiting, more particularly after food, for which she had been strictly dieted. At present, she says, she has had no relief from the bowels for ten days, and has vomited an aperient draught taken yesterday.

The abdomen is tumid, but hardly in proportion to the stated duration of the constipation; and her general health appears to have suffered but little; indeed, she has a good colour and healthy countenance. She was ordered to have a turpentine and castor oil enema immediately, and another in two hours, if required.

7 p.m. She has had two injections without relief; meanwhile, she has taken her diet without vomiting. A third injection was administered through an O'Beirn's tube, but without any better result; it passed readily, but returned almost unchanged. She was ordered to have two cathartic pills at bedtime; two drachms of castor oil three times a day; and an enema every morning, if required.

This treatment was continued for some time but without any decided amendment. On February 1st, a pill containing aloes and soap was substituted for the castor oil, but she seldom had a relief without an injection. On the 19th, I prescribed a pill containing half a grain of extract of nux vomica, and two grains and a half of nitrate of bismuth, three times a day. She now passes her urine regularly, and does not often vomit her food; but the abdomen is distended with flatulence, and the bowels remain very obstinate. On March 12th the compound gentian mixture was prescribed, and five grains of compound iron pill three times a day. The bowels are acting very irregularly, and the motions are hard and lumpy. On the 14th there was no improvement, and I gave her aqueous extract of aloes and ox-gall, of each two grains in a pill to be taken three times a day. On April 16th, she was taken unwell for the first time for six months. A few days ago her bowels began to act freely, and continue to do so; but previously to this she has scarcely on any one occasion since she came into the hospital had relief from her bowels without an injection. She was discharged.

Case xxviii. *Obstinate Constipation, with Retention of Urine: Recovery.* A. A. was admitted into the Hospital on May 2nd, 1855, for long continued and obstinate constipation; she now also suffered from retention of urine. The abdomen was much distended, uneasy under pressure, and the rectum impacted with dry hard fæces. She was ordered a black draught immediately; a teaspoonful of confect. of senna every night, and a pill twice a day composed of ox-gall and aqueous extract of aloes, of each two grains; also an enema two or three times a week in the morning.

This treatment answered; large quantities of fæcal matter were almost daily evacuated, and on the 28th she was discharged cured.

Case xxix. *Impaction: Supposed Uterine Tumour: Recovery.* E. P., aged 20, was admitted June 9th, 1855. She stated, on admission, that she had for some weeks suffered extremely from weight and bearing down at the lower part of the body, producing difficult micturition and inability to walk. She was obliged to be *carried* into the reception room, and afterwards into her ward, and seemed to be in very great pain. She told me her medical attendant said she was labouring under serious disease of the womb, and ought to lose no time in getting into the Hospital. On making an examination, I found the vagina almost, as it were, obliterated by the pressure of an immensely loaded rectum, and could not without great difficulty reach the uterus, which, however, I at last discovered to be healthy. I ordered two grains of ox-gall and two grains of watery extract of aloes in a pill, to be taken three times a day, and a large injection every morning.

On passing the ward in a day or two, I heard a loud screaming; and on making inquiry as to the cause, I found my patient had been passing a most enormous quantity of hard lumpy fæces; it came away in large masses with scarcely less difficulty and suffering than if she had been in severe labour. I never before saw such a quantity expelled at one time, and the pain produced by it was very considerable. This was, however, her cure; the pills afterwards produced daily evacuations, and on the 20th she was discharged cured, remarking when she left that she never felt better in her life.

Case xxx. *Constipation: Recovery.* On November 5th, 1857, I was summoned into the country to visit a previously healthy farmer, 65 years of age, who, two days before, was seized with sudden and severe pain in the abdomen whilst walking about his farm; the pain increased after he got home to such an extent as to oblige him to send for medical assistance. Various remedies were employed, but no relief from the bowels could be obtained, and he soon exhibited all the usual signs of intestinal obstruction. The pulse, however, remained quiet, and there were no inflammatory symptoms. Shortly before my visit this evening, an enema (the third during the day) returned coloured with fæcal matter, and brought with it a few *débris* of scybala; soon afterwards, another similar scanty evacuation took place; and these, together with the assiduous application of hot anodyne fomentations to the abdomen, afforded him great relief from pain. I advised a continuance of the fomentations, with a daily enema, and a pill three times a day containing two grains each of watery extract of aloes and extract of henbane; also an opiate liniment to be rubbed upon the body at intervals. These measures had the desired effect: on the following day he had copious evacuations, and soon perfectly recovered.

He is still (Nov. 1860) in a very good state of health.

Case xxxi. *Constipation: Impaction: Recovery.* On October 23rd, 1858, I went with Mr, —, to visit a medical gentleman in the country, 49 years of age, who was suffering from distended abdomen and fixed pain in the seat of the left kidney; he had had no relief from the bowels for several days, "felt no movement in them below the navel on the left side." He had vomited and been unable to take any food for three days; but he had neither fever, nor rapidity of pulse. Countenance very worn, and anxious, from inability to sleep or rest in any one position. There had been retraction of the testicle and great pain there, and it was supposed he was passing a renal calculus. On pressing the left side of the body between my fingers and thumb, I could feel crepitation as if of air amongst fæces, and had no doubt of the bowel being full. I advised cupping in the loins, which eased him a good deal. He took also some carbonate of potash, magnesia, and extract of poppy, twice in the night; and in the morning we gave him a large injection, which at first brought away a little fæcal matter, and, an hour afterwards, a large quantity of heavy pulpy matter, which gave him immense relief. I could, however, still feel that the colon contained solid matter, and we gave him a grain of watery extract of aloes and of extract of poppy every four hours. On the following day, Monday, he had another large motion; and on Tuesday I was informed that "almost a ton of fæces" had passed; after which he soon recovered; and up to the present time, Nov. 1860, he has had no return of the complaint.

Case xxxii. *Obstruction: Impending Peritonitis: Recovery.* August 1st, 1860, I was summoned to a gentleman, aged 63, of nervous temperament and always subject to constipation. The message came early in the morning (Wednesday) and was very urgent. I found he had been much engaged of late in business of importance requiring much thought and mental effort; and he complained of not feeling well on Monday. On Tuesday, after dinner, he partook rather largely of fruit, especially black currants, the skins of which he swallowed, thinking they would be good for the bowels. In the middle of the night he was seized with severe pain in the abdomen in the situation of the ileo-cæcal valve, accompanied with headache, and inclination to be sick; the pain continued in spite of two injections and two doses of castor oil. When I arrived, I found the abdomen tense and tender on the right side, and although he had taken aperients there seemed to be no movement in the bowels, no rumbling of air about the abdomen, but frequent eructations from the stomach. There seemed to be no peritonitis, he was not feverish, pulse under 70, and skin rather cold. The urine was loaded; and the injections had come away uncoloured. His tongue was very much furred, and I gave him half an ounce of castor oil with ten drops of laudanum, ordered a dose of tartrate of potash and rhubarb every four hours, and anodyne fomentations to the abdomen. On the following morning I found he had no relief, and the tenderness in the right side of the abdomen had very much increased. Tongue furred; pulse wiry, and beating 120 in a minute. Great inability to move on account of pain in the body. It was clear that inflammatory mischief was beginning to manifest itself, and that aperients must be discontinued. We applied leeches on the most painful spot, to the right of the umbilicus, to be followed by anodyne poultices; and we gave a very large enema of soap and water, castor oil, and Epsom salts. When this came away there was evidently some dissolved fæcal matter in it, as well as one whole black currant and the skins of several others; and later in the day, he had another liquid relief coloured by fæcal matter. We then gave him a grain of watery extract of aloes, and two grains of extract of henbane in a pill every four hours, and ten minims of chlorodyne occasionally if in pain.

August 3rd. The leeches relieved the pain, and the pulse was a little below 100; but there was still tenderness in the body, and no more relief from the bowels; so we repeated the injection (a handbasinful) and this brought away a larger quantity of dissolved fæces, and several whole black currants, besides the seeds of many others. This relieved him a good deal, he perspired freely, and afterwards was able to take a little tea with bread and butter. In the evening he had another small motion, but the abdomen remained distended and uneasy. The pills were continued.

August 4th. He had a better night; tongue cleaner, pulse down to 70 and soft. Abdomen full, but less tender. No sickness. We gave another large soap and water enema, which brought away more currants, and more fæces also, but quite in a fluid form. He felt much more comfortable after this, and we ceased to be apprehensive about the result of his case.

August 6th. Another injection was given this morning, and this time it was followed by several evacuations of large quantities of fæces both fluid and solid, as well as of skins of currants. Up to the present time the pills had been continued, but we now ordered them to be taken less frequently.

He was so much better that I was not required to see him again; but I was informed on the 8th, that the bowels had gone on acting quite freely, and that he was well enough to dispense with further medical assistance.

Had purgatives been continued after febrile symptoms had set in on the 2nd I believe a very valuable life would have been placed in great jeopardy, if not lost; and the later progress of the case shews, like numbers of others, the value of small doses of the watery extract of aloes in softening, and rooting out, hardened fæces impacted in the large intestines.

[*To be continued.*]

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Continued from page* 62.]

Local Treatment. From the earliest period in the history of medicine, we find that the local treatment of *strumæ* has obtained the greatest consideration, and that practitioners have vied with each other in their enthusiastic recommendation of various sovereign remedies for the discussion and destruction of the disease under various phases.

The following quotation from Paulus Ægineta affords an illustration of the many and diverse forms of applications which, at a very early period, were in common use:—

"Strumæ," writes this intelligent physician, "may be properly discussed by means of the sordes of baths, oil, or axunge; or equal parts of quick lime and natron, and four times the quantity of cardamon and fenugreek, may be boiled with honey for an emollient ointment and applied. This one discusses hard strumæ, and produces the rupture of suppurated swellings; the flour of darnel boiled with pigeon's dung, or linseed and wine; or, green olives, either wild or cultivated; or, the white cardamus triturated with liquid pitch and made into an emollient ointment may be applied; or, the ashes of the dried root of the wild cucumber, and the burnt dried leaves of the bay, may be mixed with turpentine and applied; or, equal parts of stavesacre and of natron, with double the quantity of rocket, may be applied with rosin; or, goats' or cows' dung boiled in vinegar; or, the flour of bitter vetches soaked in the urine of a young person not come to manhood, and added to melted pitch, wax, and oil; or, a dead snake may be thrown into a pot, and being covered over with gypsum, it is to be put into a furnace, the ashes of it mixed with equal parts of fenugreek, and then added to honey, and used. And the composition from asps is an admirable one; also, that from fullers' herb, that from the wild cucumber, and that from cedar rosin, etc." (Dr. Francis Adams's *Translation of Paulus Ægineta*, vol. ii, p. 91.)

It is by no means uncommon to find the most distinguished of ancient names associated with some well known *nostrum* which was held in general esteem on account of its reputed efficacy in the dispersion of enlarged glands dependent on tuberculous or scrofulous disease. Celsus had a favourite discutient; and others far less noted, not only in his time but in our own, have derived no small reputation and emolument from the sale of lauded and extensively advertised compositions.

The practice of the present day, as regards the local management of diseased glands more or less associated with tuberculous manifestations, is, without doubt, founded on the experience and teaching of the ancients, although legitimised by science and the well-authenticated results of observations. Still, it cannot be denied that considerable ignorance and *routine* very frequently promote the adoption of certain local measures which are not only inappropriate but absolutely mischievous. It is true that only in the hands of empirics and quacks are to be traced, now-a-days, the use of truly absurd applications; but it is not unusual even for experienced practitioners to resort to means which a moment's forethought would condemn.

The following arrangement includes the various methods of local treatment which may, with more or less advantage, be employed in the different states and conditions of glandular tuberculous implications:—

Firstly. When the enlargement of the glands merely denotes incipient tuberculous mischief, and it is desirable to obtain resolution and prevent softening and suppuration, the following means may prove of greater or less service:—*a.* Warmth; *b.* Fomentations and poultices; *c.* Cold applications, as lotions, etc.; *d.* Frictions; *e.* Linaments, oils, and unguents; *f.* Paints and tinctures; *g.* Blisters and plasters; *h.* Electricity and galvanism; *i.* Caustics and actual cautery.

Secondly. When it is desired to remove or destroy rebellious tuberculous glands by more direct surgical means, a resort may be had to the following measures: *a.* Caustics and actual cautery; *b.* Irritation by means of foreign bodies introduced into the diseased glands; *c.* The knife.

Thirdly. When softening and suppuration have led to destruction of the implicated gland, and rendered surgical assistance necessary, either *a.* Caustic; or *b.* The knife, may be employed.

Fourthly. When ulceration follows suppuration and true tuberculous ulceration results, it may be desirable to employ—*a.* Fomentations and poultices; *b.* Lotions; *c.* Unguents; *d.* Caustics.

Fifthly. When healing has taken place, but scars and deformity result—*a.* Unguents; *b.* Caustics; *c.* The knife, may be called into requisition.

1. Prior to the actual deposition of tubercular matter in lymphatic glands, some enlargement, as already observed, takes place, which is generally believed to depend on what has been somewhat indefinitely termed irritation.

It still remains a vexed question with many, whether the deposition of tubercle is preceded by true inflammatory changes in the invaded gland, or whether the very first signs of increase in size are alone owing to the presence of tubercle.

M. Broussais (*Exam. des Dict. Méd.* tom. i, prop. 168) and Dr. Alison are foremost among those who believe that tubercles are deposited subsequently to a more or less deranged state of the local vascular circulation; while directly opposed to this assertion are the opinions of Bayle, Laennec, Louis, etc. But there are certain authorities who lean to a conclusion intermediate between those two views, and admit the occasional origin of tubercles in a state of inflammatory congestion of the capillaries, preceded and accompanied by a constitutional disposition to tubercular productions (Article "Scrofula and Tubercles"—Dr. Copland's *Dictionary of Medicine*. 1858.)

The accomplished and experienced physician to whose work I have just alluded, admits that the results of his own observations, gathered, for the most part, from cases under his notice at the Children's Infirmary in London, coincide with the deductions of M. Gendrin; who states that tubercles, during the whole of their early stage, are entirely independent of every form of inflammation; and that it is not until they begin to soften that the tissue surrounding them begins to be inflamed, this tissue then secreting a fluid which aids in dissolving the dense matter composing them. (*Op. cit.*)

It is far from easy, amid such discrepancy of opinions, to enjoin any fixed methods of topical treatment for the alleviation or removal of the earlier stages of glandular tubercular implication; and therefore the practitioner cannot too closely study the particular features of every case of the kind which may fall under his notice, as a resort to local means of treatment ought to be based on the due recognition of the pathological changes which are then taking place.

Notwithstanding the difficulty of arriving at a correct appreciation of the earliest development of glandular tubercle, still, as was observed when treating of the recognition of the affection, it may be materially lessened, by marked attention not only to the enlargements themselves, but to constitutional formation, more general derangements, and extraneous causes.

When once the mischief, involving a single gland or a series of glands, is correctly estimated, one or more of the following methods may be employed, either to arrest its further progress, or to modify the symptoms and results which ensue:—

a. Warmth. One of the most common causes of tuberculous implication of the externally situated lymphatic glands is an undue exposure to cold and vicissitudes of temperature. When disease is thus engendered, provided it has not too far progressed, it often results that a mere cessation of the cause leads to a gradual but certain recovery. A knowledge of this fact prompts the practitioner to advise change from a cold to a warmer climate, and also to recommend that the implicated glands should be exposed as little as possible to the action of diminished and varying temperatures. To this end it is often advisable to protect the enlarged glands by means of flannel, cotton-wool, or a black silk neckerchief; and it is often astonishing to find how warmth thus ensured conduces towards speedy resolution. It has already been shown that, according to the position of the lymphatic glands, so is the frequency of diseased action; and there can be no doubt that attention to due regulation of local temperature is a feature of very considerable moment in the treatment of these organs when but slightly involved. I am satisfied that it has often fallen to my lot to ward off an approaching attack of serious glandular mischief, by simply advising recourse to more appropriate means of clothing exposed portions of the body; and there can be no doubt that among the higher classes the susceptibility exhibited by delicate children to experience glandular derangements is, in a great measure, to be traced to the inefficient way in which the neck and shoulders are protected from variations of temperature.

b. Fomentations and Poultices. Although warmth is of such direct advantage in the reduction of glandular enlargement of an incipient tubercular character, it is questionable how far the very common practice of resorting to fomentations and poultices is commendable. Experience has convinced me that too frequently such means are employed most indiscreetly, and hence the most serious consequences sometimes ensue.

By a resort to one or other of these applications, a perturbed local circulation is not unusually still more altered, and destructive changes, such as softening and suppuration, are induced. I have over and over again seen such consequences result from an injudicious use of these means, and have thereby been led to think that they are only of value when stiffness, pain, and more than usually acute disturbance accompany the earliest manifestations of disease.

If the use of hot fomentations be injudicious, poultices, whether of linseed or bread, are still more so, as they particularly tend to soften and sodden the investing integuments, and thereby render them more susceptible of inflammatory changes, especially those ending in abscess.

c. Cold Applications, as those of Water and various Lotions. In the first stage of glandular tubercular derangement, the use of various cold liquid applications has been forcibly recommended by various practitioners, but I cannot too strongly condemn a general resort to this practice. If in some instances it be fraught with no very decided harm, still it is certainly not followed with that amount of amendment which some would have us believe. Dr. Cullen was opposed to such means in the treatment of glandular tumours, and spoke but disparagingly of the then vaunted *saccharum saturni* and saline applications. (*Op. cit.*, vol. iv.)

Sluicing with cold water is adopted by some surgeons, but, as a rule, the contact of fluid of a low temperature, especially when suddenly applied, is, I consider, a practice often directly opposed to a favourable solution of the existing mischief. But topical applications of certain lotions, such as those of lead, spirit, and ether, may be advantageously used when the inflammatory disturbance is subacute, or even of a still more intense character. With the late Mr. Goodlad the use of sulphate of zinc in an aqueous solution was held in high repute, and contemporaries equally extolled the supposed virtues of chloride of ammonium.

With Lebert, I believe that these and various other soluble salts are of comparatively little or no real value. Topical ablutions with salt water were supposed by White and others to possess a specific effect on tubercular glands in an early stage; but I must confess that the same opinion is not confirmed by my own observations; for it is more than probable that the fresh air, exercise, and, perchance, internal medicinal treatment, of which the patient at the same time partakes are, in themselves, quite sufficient to lead to resolution.

d. Frictions. Early in the commencement of the present century, friction, by means of the hand and certain substances, was very strongly recommended. Mr. Russell remarks, "I consider the use of repeated friction to be one of the most valuable improvements which have been introduced into practice in modern times." (*On Scrofula.* 1808.) When induration has proceeded to such an extent that manipulation of the tumours no longer causes tenderness or pain, I am sure that well-regulated and occasional dry frictions by means of the hand, with, perhaps, the addition of some interposed substances, such as common flour or starch will be found advantageous in reducing, if not the bulk of the glands, at least that consolidation of the cellular and surrounding tissues which so frequently results from glandular implications. But, as a rule, such means cannot be depended on for the resolution of enlargements which result from incipient tuberculous mischief; and, consequently, it is only of real utility when the disease has not progressed beyond simple inflammatory changes.

What I shall presently urge against the use of unguents and other local applications, may be consistently applied to the common resort to frictions; namely, that injudicious and frequent topical interference with tubercular glands oftentimes promotes the generation of more active mischief, and certain changes, such as softening and suppuration, which it is most desirable to avoid.

c. Liniments and Oils. If it be an accepted belief that the enlargement which ensues in the earlier stages of tuberculous disease of the glands is, as a rule, dependent on the actual deposition of tubercle without the previous occurrence of decided vascular irregularity, then, I think, that the less local means are adopted the better; for it is by no means satisfactorily proved that tubercle, even under the most favourable circumstances, is always capable of such disintegration as will permit of absorption and removal. Dr. Copland, however, states, "that scrofulous and tubercular matter may become partially resolved and absorbed, the cretaceous or mineral parts of the deposit only remaining, as has been proved to take place; but the exact circumstances in which it does take place have been very insufficiently ascertained." (*Op. cit.*)

It, therefore, appears that before adopting the use of any local applications in the shape of liniments, oils, and unguents, it is all-important to arrive at, at least, a tolerably correct appreciation of the cause and nature of the glandular enlargement, and whether simple inflammatory action alone, or in consort with tubercular deposit, constitute the increase in size.

Frictions by means of one or more of the above-mentioned applications must, therefore, be employed with extreme care; for, unless such be observed, it is more than probable that not only disappointment, but actual mischief, may result. When the surgeon foresees that the use of either liniment, oil, or unguent, may be of service, one of the following may be selected:—

Liniment. To cause sufficient irritation, so that the absorbents may be efficiently stimulated, an useful preparation is that composed of strong ammonia, chloroform, camphor, and soap liniment, in such proportions as circumstances may point out. Should the swelling still increase or remain obstinate, liniments containing tartar emetic and croton oil may be more effectual; but I am loath even to mention these preparations, for I am certain that their diligent application more often leads to mischief than success, and that a new phase is thereby not unfrequently given to perhaps a comparatively harmless, or at least latent, form of disease.

Oils. The use of various oils rubbed over and into the integument covering enlarged and apparently tubercular glands in an early stage, is, by many excellent surgeons, supposed to be a practice accompanied with satisfactory results. The oil of the cod's liver, when rubbed over the enlarged glands by means of the hand, appears the most useful, and although it may not frequently be of value in immediately or solely effecting reduction of the implicated organs, still its inunction, as previously stated, is often highly advantageous.

The oil when ozonised (according to the process of Mr. Dugald Campbell), and taken internally, is said to possess greater virtue than when employed in its natural state; and it is, therefore, probable that inunction with it so prepared is still more efficacious.

The combination of the oil with iodine is, however, the most valuable that can be employed; but the presence of free iodine leads to discoloration of the parts to which it is applied, a result peculiarly objectionable to many patients. I have found that iodide of ammonium, in conjunction with the oil, and which I believe to be equally efficacious, is not followed by the same objections; and I now seldom or never prescribe pure iodine in combination with oil, as a local application to those parts of the body which are exposed to observation.

A solution of iodine in juniper oil has been made for me by Messrs. Squire, of Oxford Street, but I cannot advocate its use as a local application, owing to the exceedingly pungent smell which the solvent possesses. It may, however, be remarked that a very considerable amount of iodine may be held in solution without imparting to the oil the intense red colour so indicative of its presence.

Unguents. From the earliest times the use of certain unguents has been more or less lauded by all writers on scrofula. Doubtless their value in incipient stages of glandular tubercular implications is, in a measure, founded on a belief in the chronic inflammatory action which has pervaded the gland tissue. When it is expedient to have recourse to local inunction, it is usual to select such preparations as contain mercury, iodine, etc., in virtue of their universally supposed efficacy in all kinds of scrofulous maladies.

The mercurial ointment most in repute is the *unguentum hydrargyri* of the *Pharmacopœia*, which can be diluted in proportion to the extent and nature of the induration. A small portion of the ointment is to be rubbed once or twice a day for a few seconds or minutes over the gland swellings, provided that no inflammatory processes have rendered the covering integuments irritable and painful. When diminution of the enlarged and affected glands follows a somewhat prolonged use of the ointment, I am inclined to believe that the effect is oftentimes to be traced to the absortion of the mercury into the system, and its subsequent local action. The readiness with which this metal is absorbed tends to confirm this suspicion; and it is partly on account of its lowering action on the economy that, as a rule, I object to its general administration in certain forms of scrofulous disease.

When iodine is advised as a local application in the form of ointment, it is generally employed as recommended by the *Pharmacopœia*, under the name of *unguentum iodinii compositum*. I seldom have recourse to this preparation, on account of its dark red colour, especially when not quite fresh, and the properties it possesses of staining and irritating the skin to which it is applied. I now prescribe an ointment composed of a scruple or a drachm of iodide of ammonium and an ounce of spermaceti cerate, a portion of which can be rubbed into the integument once or twice a day without causing the above-mentioned results. In this, I think, an efficient substitute is gained, and one much more to the fancy of the patient.

The same remarks apply, but in a less forcible way, to the use of iodide of potassium; but I find that iodide of ammonium, by reason of its less stable and somewhat slightly caustic properties, is more suitable. When an ointment composed simply of iodide of ammonium is carefully prepared, it ought to be almost or quite colourless, and remain so even when exposed for some time to the influence of the atmosphere.* At the present time, I have two patients under my care, the subjects of tuberculous disease of the cervical glands, who have experienced much benefit from the local application of iodide of ammonium. Sometimes with considerable benefit, mercury and iodine may be associated together, in the form of *unguentum hydrargyri iodidi* (*Pharm. Lond.*). The latter mineral may also be combined with lead, as in the *unguentum iodidi plumbi*, which has been recommended by Dr. Copland and others. When pain and irritation complicate the progress of the glandular mischief, opium may be advantageously combined.

In addition to the unguents I have enumerated, many containing bromine, tar, and other ingredients, are in frequent use, according to the fancy of the practitioner. I am, however, convinced that the local application of ointments, especially when persisted in, is very frequently followed by untoward results which it is most desirable to prevent.

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* Ointments containing iodide of ammonium in various proportions have been carefully prepared for me by Mr. Fincham, of Baker Street.

f. Paints and Tinctures. In the form of paint or tinctures, iodine is very often locally applied, but not always with advantage even in the most favourable instances, by reason of the great irritation which it causes. I am confident that the far too common resort to these preparations is fraught with extensive and irremediable mischief. An amount of irritation resulting in premature softening and suppuration is thereby induced, and frequently a comparatively trivial affection is converted into a much more formidable one. A case illustrating these observations has very lately fallen under my notice; and, from many which I have seen, I am led to discourage, rather than recommend, even with caution, a resort to means so liable to complicate existing mischief.

g. Blisters and Plaisters. The remarks which are offered regarding liniments, unguents, etc., may with equal propriety be applied to the employment of blisters and plaisters. The application of a blistering substance is, however, sometimes of advantage in deciding whether a single gland, suspected to be of a tuberculous character, is really permanently impaired and enlarged, or capable of reduction and complete resolution. The employment of plaisters I have always looked upon as a relic of empirical practice, and have seldom had occasion to resort to their application, except to gratify the fancy of a whimsical patient.

h. Electricity and Galvanism. The application of the electric current to tuberculous glands in a somewhat recent state was first suggested by Sigaud La Fond, and subsequently approved of by White and other authorities on scrofula. I cannot, however, say that I have ever seen the least advantage result from the most persistent use of electricity or galvanism; and I believe that those who so strongly advocate the use of such subtle means are really not aware of the true pathology of glandular tuberculosis.

i. Caustics and Actual Cautery. Completely or partially covering the integument investing incipient tuberculous glands with certain caustics is a method frequently practised on the continent, under the impression that the absorbents are thereby stimulated to the extent necessary to remove the existing mischief. In the same way, the actual cautery is applied at various points of the skin enclosing the diseased gland or glands, with just sufficient precision to ensure destruction of the cuticle and induce a moderate amount of irritation. I have seen this plan resorted to in some of the Parisian hospitals, and, having suspicions of its utility, gave it a trial, but very soon relinquished an experiment which I conceived unsurgical, and which, even if attended with slight advantage, is extremely objectionable to patients.

Such is a brief *resumé* of the means most generally employed for the topical treatment of *incipient* tubercular disease of the external absorbent glands; and, although I have stated that occasionally the adoption of certain preparations is followed with advantage, still I cannot too forcibly insist on their discretionary use, and on the importance of remembering that the greatest benefit is to be derived from a systematic and judicious administration of certain medicines and diet, and from a strict attention to all sanitary influences.

[*To be continued.*]

The Council of Health in Paris. The municipal council of Paris has voted a sum of money for the purpose of allowing the *adjoints* of the Council of Health the same sum as the titular members; and a decree fuses both the *adjoints* and the titular members into one class. The present *adjoints* are Messrs. Boudet, Bouchardat, Duchesne, Michel Lévy, Jobert de Lamballe, Trébuchet, and Poggiale. The emoluments of the members of the Council of Health are 1200 *francs* (£48) besides fees for attendance.

Reviews and Notices.

Chapters on Diseases of the Ovaries. Translated, by permission, from Kiwisch's Clinical Lectures on the Special Pathology of the Treatment of the Diseases of Women. With Notes, and an Appendix on the Operation of Ovariotomy. By John Clay, Member of the Royal College of Surgeons of England, etc. Pp. 254 and clxxvi. London: John Churchill. 1860.

This work is commenced with chapters on the Anatomy and Physiology of the Ovaries, and on the Pathology and Diagnosis of Ovarian Diseases in General. The Special Diseases of the Ovaries are then considered under the heads of—1. Absence and Imperfect Development: 2. Dislocations, or Herniæ; 3. Inflammation—*a.* Apart from the Puerperal Condition, *b.* In the Puerperal Condition; 4. Abscesses; 5. Simple Follicular Degeneration (Formation of Cysts) of the Ovaries; 6. Compound Cysts—*a.* Cystoid; *b.* Alveolar Degeneration; *c.* Cystic Sarcoma and Cystoid Cancer; 7. Solid Tumours—*a.* Hypertrophy; *b.* Adipose Cysts; *c.* Apoplexy; *d.* Fibroids; *e.* Enchondroma and Formation of Bone; *f.* Cancer.

In the treatment of unilocular ovarian cysts, puncture of the tumour through the vagina, as a means of radical cure, is favourably spoken of by Kiwisch, This operation in his practice, was performed with a long curved trocar; the opening being made between the uterus and the rectum, in the direction of the axis of the pelvis. After a little fluid had been evacuated, a long metal director without a handle was passed through the cannula as deep into the cyst as it would go. The cannula was then withdrawn, and a long small probe-pointed bistoury was guided along the director into the cavity; and by it the wound was enlarged sufficiently to admit the fore-finger. A long curved uterine tube was then introduced deeply into the cavity, and fastened by a T bandage. The operation was generally followed on the second or third day by severe febrile reaction. During from ten to twenty days there were an ichorous discharge and much local pain; in favourable cases, these gave way gradually to a purulent discharge, which disappeared in six or seven weeks, leaving the cavity perfectly shrivelled and obliterated. The after-treatment of the cases consisted in the careful injection of lukewarm water through the tube thrice a day, sometimes with vaginal injections. It is not, according to Kiwisch, advisable to remove the uterine tube until considerable decrease of the disease has taken place.

Schnetter has proposed a more simple plan, which Mr. Clay describes in a foot note at p. 143:—

"A curved trocar is introduced into the vagina with the point drawn back, and plunged into the tumour felt through the vagina. The stilet is then withdrawn, and a knife introduced through the cannula, which is an inch and a half long in the blade, and fixed upon a handle constructed according to the curve and width of the cannula. The blade of the knife projects beyond the cannula. The knife and the cannula are now withdrawn from the wound at the same time, and the latter is now dilated to such a size by pressure on the knife that a finger can be conveniently introduced. An elastic tube, about as thick as a finger, is then inserted and bound without the genitals."

The statistics of the mode of operation are limited. Dr. West objects to it, on grounds which are stated by Mr. Clay at P. 146. Nevertheless, Mr. Clay says that

> "Notwithstanding the fears of Dr. West, the success of this method of operating, according to his results and those of Kiwisch and Scanzoni, is very great; by no other treatment have similar results been obtained. On these grounds we recommend strongly an extended application of tapping, *per vaginam*, conjoined with irritant and subsequent emollient injections." (P. 147.)

When the vaginal puncture is not practicable, Kiwisch recommends incision of the cyst from the abdominal coverings, particularly when extensive adhesions exist, and at any rate the excision of a part of the cyst-wall, as the most proper treatment. All these modes of operation are, however, attended with danger. As a palliative treatment, abdominal tapping, both on account of its danger and the uncertainty of the relief it affords, should be performed only in dangerous or very distressing cases. In very rare instances is it followed by a perfect cure or long continued amelioration.

Mr. Clay has done an useful work in placing within the reach of the British medical public the observations of the late Professor Kiwisch on Ovarian Diseases; and he has increased the value of the book by appending to it series of carefully drawn up tables, with summaries, of all the known cases of ovariotomy to the records of which he has been able to gain access. From the tables we gain the following results:—

	Recovered.	Died.	Not known.	Total.
Completed cases ..	242	183	0	425
Partial excision ..	10	14	0	24
Extra-ovarian tumours removed	3	10	0	13
Operation abandoned from adhesions	58	24	0	82
Operation abandoned from tumours being extra-ovarian	16	3	4	23

The Gastric Regions and Victualling Department. By An Old Militia Surgeon. 8vo. Pp. 119. London. 1861.

This little volume is a protest against the irregular and inordinate feeding, the luxurious dishes, and greasy, acid concoctions and stews, and light Gladstonian wines of the age in which we live. The author holds up before our eyes for our monition a fat, puffy individual, and for our examplar Tom Sayers as being the representative of a body as it ought to be—of course, he means Tom Sayers in condition, not in his ordinary cups. "Fat and flatus" are the evils which inform us that we have become prematurely aged, in consequence of our over-gorging. Our teeth decay, our hair falls off, the colour of our Anglo-Saxon skin, and eyes, and cheek vanishes—in fact, we are rapidly fading away; and if we arrest not the evil in time, as volunteers, we shall have no heart, having no stomach, to meet the Gallic cock, when he comes strutting and crowing across the Straits; and we shall fall like so many unpoetical Sardanapali. All this because we have forsaken roast beef and honest ale, and cider and perry, and bread and cheese; and have taken to a flashy acescent diet, light wines, and thin base beer. The old soldier tells his tale as an old campaigner; but what effect he may have in turning the culinary propensities of our people into a better direction we cannot tell. We fear, however, that he will have more readers than followers of his system. The world has a long journey yet to make before it will arrive at that blessed Utopian state, at which men will begin to follow reason when consulting their animal appetites—or, in other words, when the appetite shall be subjected to and regulated by the rules of physiology and common sense. The satisfaction of the gustatory nerves is, unfortunately, a very powerful pleasure, so that the wisest of men are apt to regard their gratification as a thing to be done even at the cost of much fat and flatus—of which our author has so very fierce a dread.

How to Work with the Microscope. A Course of Lectures on the Practical Use of the Instrument and Microscopical Manipulation. By Lionel Beale, M.B., F.R.S. Pp. 124. London. 1861.

This is a new edition of a very useful work. It contains thirty-two pages of wood-cuts, which will greatly assist the microscopical observer. The author restricts himself to the giving of hints and directions to the student while at work with the microscope; and he gives these directions in the plainest terms. His work is, therefore, strictly of a practical character. For the structure, history, etc., of the microscope, he refers his readers to the larger works of Mr. Quekett, Dr. Carpenter, Mr. Hogg, and others.

We need hardly say that this work is from the pen of one who has long been an arduous labourer in the field of microscopy, and who is, therefore, himself practically well acquainted with the wants and requirements of microscopical observers. That he has here truly and well supplied those wants is certain. We should add that the wood-cuts are beautifully executed.

Anatomy of the Arteries of the Human Body, Descriptive and Surgical, with the Descriptive Anatomy of the Heart. By John Hatch Power, M.D., etc. With Illustrations by B. Wills Richardson, F.R.C.S.I. Pp. 374. Dublin: Fannin and Co. London: Longman and Co.; Simpkin and Co. 1860.

The nature of this work is indicated in the title: it contains both the descriptive and the surgical anatomy of the arteries. In the surgical portions, Dr. Power has described the various methods of operating on the vessels recommended by different surgeons; and here and there are introduced the histories of some of the more remarkable and illustrative cases of operation for aneurism. The book is concluded with an account of the principal varieties which have been met with in the distribution of the arteries. The woodcuts, sixty-three in number, are on the whole well executed, and give as fair an idea of the anatomy of the various vessels as can be gained from illustrations on a reduced scale.

The book would have been rendered more complete by some remarks on the structure of the arteries, and on the effects produced on them by ligatures, etc. But still it is calculated to be useful to the student and to the practitioner, and therefore we commend it to favourable notice.

British Medical Journal.

SATURDAY, FEBRUARY 9th, 1861.

THE MEDICAL TIMES: A MORAL.

The *Medical Times*, apparently for want of a better subject, last week indulged in one of its periodical fits of abuse of this Journal. We notice the fact, therefore, not on account of the novelty of the thing, nor for the purpose of replying to any of the abusive items—the items contained in it being simply such —but solely for the purpose of improving the occasion by extracting a moral from this tale of journalism. The language of the article, its improper style, and its unfounded statements, forbid our joining issue with the writer on any of the particulars contained in it. We leave him in the quiet possession of all the virtue he can extract from such honey. But we must have the moral. His purposes in writing it may, he fears, be mistaken. Let him lay aside his fears. He may rest assured that there is no chance of any mistake occurring in the matter on the part of any one who reads it. The *commercial trick*, old and familiar, is transparent in every line of it. The writer says that all the readers of the British Medical Journal read the *Medical Times*, but we believe this is not the case; and we therefore write these lines for the express purpose of calling the attention of those, who have not seen it, to this article. We wish them to have an opportunity of satisfying themselves of the nature of the fruits which a journal conducted on commercial principles can bring forth, when these principles are, either in reality or in imagination, invaded. We venture to prophesy that every one of our readers, who peruses the article in question, will rise therefrom with a conviction of the absolute necessity for the existence of a journal such as the British Medical Journal, "which represents no individual interests, and which has no commercial considerations to fetter its expressions or qualify its views". This is the moral we would draw from this journalistic episode.

If, indeed, it were not that we regret to see the medical press so forgetful of its mission, we should feel a personal gratification in this strange exhibition of uncalled for ill-will. It proves in our mind, most unmistakably, the vigorous life and successful growth of our Journal; for only one idea could have produced it. The writer must have laboured under a strong conviction of the (to him) unwelcome fact, that there is in the profession a very strong determination that this Journal shall flourish, free and independent of all personal interests (we repeat it again), to be a means of sustaining the honour as well as promoting the science of medicine, without truckling or pandering to the individual fancies either of the profession or the public.

This is the reason why we have chosen the *Medical Times* to point a moral, and we regret we cannot add, to adorn a tale. We ask for nothing beyond the fact of the appearance in a respectable medical periodical of such an article as the one we now refer to, to justify the existence of the British Medical Journal.

THE CORONER'S OFFICE.

If any one will take the trouble to count the number of cases that have occurred within a given time, in which the superior courts have reversed the decisions of legal and medical coroners, he will, we have no doubt, find that the validity of the verdict delivered in the lawyer's court is far more frequently impugned than that which has proceeded from the doctor's. It is worth while to consider what are the causes that lead to this result.

The coroner's office is one of very ancient date; and in the reign of Edward the First coroners were required to be knights, and to be possessed of considerable landed property—in short, to be men of substance and of enlarged and liberal views. At the present time they appear, when chosen from the legal profession, to retain only that "antique rigour and overdone severity" in the examination of evidence, which, in the more early ages, distinguished all judges, who, being bred in habits of great subtlety, and unacquainted with the general concerns of men, confined the sphere of their jurisdiction to the bare maxims and fictions of law. To this punctilious exactness in the administration of justice, is probably to be ascribed the fact that far more frequent appeals to the House of Lords, and the Council Board, where laymen sat as judges, were made in criminal causes formerly than can be the case now: and hence it is that at the present time the coroners who are chosen from a subordinate branch of the legal profession, and are compelled by the narrowness of their education to confine themselves within the limits of literal interpretations and established precedents, find the pressure of their verdicts resisted, and their restrictive principles not admitted, by those who claim for the elasticity of the law that it shall be governed by the demands of equity, convenience, and natural reason. The medical coroner, on the other hand, has no such fetters to bind his judgment; he sees only the open avenues to justice, and directs his inquiries to that which is the coroner's special duty, namely, the actual cause of death; with him the rules of evidence are the fundamental canons of ratiocination established by observation and experiment; and, as the law has long ago created a fictitious necessity against the ordinary rules of evidence in favour of the convenience of trade, so the medical judge, abandoning all the artificial guides that have no relation to the subject matter to be considered, proceeds directly to examine the conditions under which the death has taken place.

Two cases, recorded in this Journal, have occurred within the last few weeks, which fully illustrate the point. Dr. Watson, of Chester, has very properly appealed, in a case of supposed death from the incautious use of opium, from the verdict of a coroner's jury to the highest authority in Europe. It is at once both amusing and instructive to see how differently Dr. Christison deals with the evidence before him from the good men of the ancient city of Chester who composed the jury. Dr. Christison, with a suggestive suppression of a great deal that might be said on the coroner's analytical abilities, and the "uncommon" wisdom of the jury, passes the verdict by with a good-humoured shrug, and at once addresses himself to the science of the facts, which he treats with all the skill and dignity of a master. The other case, which has been reported by Mr. Dayman, is of equal interest to the general practitioner. The whole gist of the story here turns upon an every day occurrence, which is a fruitful source of bickering and blunder to medical men, namely, the insufficiency of most verbal messages that are transmitted from the patient to the doctor. In the case in point, the message represented one thing—the patient was suffering from another—death ensued. The legal coroner, we presume, tried to ignore the evidence of the inadequate message, but, failing this, was obliged to content himself with a parting thrust at the doctors, by telling them they had narrowly escaped being tried for manslaughter. In the course of the investigation, the coroner gave a reading of the law, as it affects the relative positions of medical men and the public, which appeared to some persons concerned so questionable, that counsel's opinion was taken on the point. The result of that opinion has been published with the case, and we cannot too strongly recommend its sentiments to the consideration of our readers.

It would be monstrous, indeed, if, according to the strict formalities of the law, the liberties of medical men were placed, even for a few hours only, at the mercy or the caprice of an ignorant and unscrupulous coroner. We apprehend, however, that no medical man, not disqualified by legal impediment, or by any physical or moral cause, from practising his art at the moment, can, while exercising his calling in a case, become the subject of a *criminal* prosecution, either for neglect or unskilfulness. If a question of neglect to fulfil a contract should arise, as in the case of an union surgeon and a Board of Guardians, the remedy by removal is in the hands of the latter. If a want of sufficient skill in the management of a case should appear, the surgeon is liable to an action at law. The boundary between the protection of the public and the security of the medical profession may be very nice to determine; but the equitable adjustment of that question can never be settled while the ban of a penal enactment is held *in terrorem* over the acts of a learned and honourable profession.

It may be objected that in cases of death taking place from malpractice during the temporary incapacity of the doctor, as in midwifery cases when the surgeon is intoxicated, the attendant should be held criminally responsible; but here, we contend, that the doctor is disqualified by a moral cause, and, having so far forfeited his professional title, is liable to be tried as an ordinary person.

In the present unquiet state of public opinion in respect of the jurisdiction of coroners, we may truly say that we have no desire either to suppress the office or to abridge its usefulness. We have, however, the warrant of no less an authority than Lord Mansfield that the rules of natural justice should not be confined within artificial circumscriptions, but that the liberality of the law should keep pace with the infinitely diversified occasions of men. The time is not far distant when the duties of the coroner's inquisition must be revised; but whether this reform shall include a Court of Review for checking erroneous verdicts, as Dr. Christison has suggested, or whether a distinct medical element shall be introduced into all inquests, cannot at present be discussed by us. In the meantime let our motto be that of all sound lawyers, *Boni judicis est ampliari justitiam, non jurisdictionem.*

THE WEEK.

A subject of interest to every member of the profession—one, at all events, utterly free from all taint of speciality—was discussed at the last meeting of the Royal Medical and Chirurgical Society; and we regret to add, notwithstanding its immediate importance, that the question in debate was left in a complete state of stagnation. We refer to the debate on the means of restoring suspended animation in the apparently drowned. Never was there exhibited a more striking proof of the want of some machinery to supplement the necessary shortcomings of the Society's meetings. The plan, so often and so wisely urged by Mr. Charles Hawkins, of delegating to well selected committees questions of this nature, might have been most usefully followed in this instance; indeed, there was, as far as we can see, no other method by which the Society could attack the subject. We believe that it is by our negligence in speaking authoritatively, through the voice of our societies—our learned bodies—on questions of this kind, that we in so many instances fail (as a profession) to gain the ear of the public. Surely, if ever there was a matter which should be settled by the profession, it is one of this kind—how to restore suspended animation from drowning, etc. It is a popular question, so to say, one which is popularly dealt with; and yet, when the people come to bear a hand in the restorative process, they find the doctors all at sixes and sevens as to how they may best go to work on the semi-moribund body. If there were a matter in which clear and definite rules ought to be laid down for the benefit of the people at large, this is evidently one. As matters now stand, the crowd—the populace-chorus—who superintend the taking the body out of the water, might fairly turn round upon us, who object to their ready method of shaking the man up by his heels, and ask us whether we don't differ on the point of treatment as much between ourselves as they do with us. For a long time, the ready method of Dr. M. Hall has been very widely accepted as the save all and cure all in this form of imminent death; and we have all *read* hundreds of cases of cures effected by it. But now, *per contra,* we learn that, however ready it may be, it is not only useless, but actually dangerous. Clear-headed men, who once gave their assent to the process, now begin to recalcitrate; and experimenters show, by their instrumental gauges, that it cannot be a remedy of service. Other methods are in consequence naturally suggested as more appropriate than the ready method. But the profession in the meantime is, as a body, in a state of hesitation and doubt; it knows not what to believe. And this great Society of ours—the head and front of the medical societies of the kingdom—shuts the question up and leaves it in this muddled darkness, because ten o'clock strikes, and the debate must end! Need we wonder that quacks thrive amain, when we care so little to impress the authority of medicine upon the senses of the people? If, as Mr. Hawkins has suggested, a Committee of a few skilled men would meet under the ægis of the College, tear the whole matter to rags, and enucleate the facts of the case, they would then be able to send in a report to the Society, which would enable that Society to exclaim aloud in every and each petty quarter of the kingdom, "This is the way to treat men suffering under suspended animation from drowning." And its voice would then be law, not a byword. This is no miserable question of a personal kind, as one of our contemporaries would wish to make it; it is one on the decision of which the life or death of hundreds every year depend. What wretched littleness of mind, to call an investigation of such a question as this the robbing from a great physiologist of his brightest jewel, perhaps, and greatest discovery.

The Queen has been graciously pleased to signify her intention to confer the decoration of the Victoria Cross on the undermentioned officer of Her Majesty's army, whose claim to the same has been submitted for Her Majesty's approval, on account of acts of bravery performed by him in India, as recorded against his name, viz.:

"Surgeon Herbert Taylor Reade, 61st Regiment.—During the siege of Delhi, on the 14th of December, 1857, while Surgeon Reade was attending to the wounded at the end of one of the streets of the city, a party of rebels advanced from the direction of the Bank, and, having established themselves in the houses in the street, commenced firing from the roofs. The wounded were thus in very great danger, and would have fallen into the hands of the enemy, had not Surgeon Reade drawn his sword, and, calling upon the few soldiers who were near to follow, succeeded, under a heavy fire, in dislodging the rebels from their position. Surgeon Reade's party consisted of about ten in all, of whom two were killed and five or six wounded. Surgeon Reade also accompanied the regiment at the assault of Delhi; and on the morning of the 16th of September, 1857, was one of the first up at the breach in the magazine, which was stormed by the 61st Regiment and Belooch battalion, upon which occasion he, with a sergeant of the 61st Regiment, spiked one of the enemy's guns."

Our readers will learn, from a courteous letter by Mr. G. A. Dartnell, how the act of "branding" is at present performed in the army. We were wrong in supposing the soldier was actually burnt, as the word implies, with hot iron. He is, it seems, tattooed. We cannot, however, alter the opinion we have expressed about the tendency of such punishments. Such distinctive markings should, we think, be affixed only on the lower animals—on New Forest ponies' flanks or cavalry horses' hoofs. What condemns the thing is this—that no such branding is performed upon the numerous consummate scoundrels who are constantly let loose on society when their various terms of penal servitude are ended. We can quite believe that an incorrigible set of vagabonds are continually practising desertion in the army for the purpose of getting "bounty" money, and must admit that it is very desirable authorities should possess some certain check over the proceeding; but still we must uphold that this method of diagnosing the rascality, however effectual, is not consistent with our modern sentiments and ideas of propriety.

The remains of the lamented Dr. Baly were interred on Monday last in Kensal Green Cemetery. The funeral procession, consisting of a hearse drawn by four horses, with three mourning coaches and a great number of private carriages, left the deceased's late residence in Queen Anne Street at half-past twelve o'clock. The occupants of the first coach were Mr. Shipp, Mr. Goodwin, Mr. Bridell, and the Rev. E. Monro, all intimate personal friends of the deceased; the second coach conveyed Dr. Martin, Dr.

Meyer, Dr. Monro, and Mr. Bedford; and in the third rode Dr. Burrows, Dr. West, Mr. Stanley, and Mr. Paget. Sir James Clark and Sir Henry Holland, physicians to the Queen, headed a long list of members of the medical profession, who attended in their own private carriages. At the cemetery, the students of the medical school of St. Bartholomew's Hospital, to the number of more than a hundred, met the corpse, and accompanied it to the chapel, where Captain Groves, Governor of Millbank Prison, and the principal officers of that establishment, joined the procession. The service in the chapel was read by the Rev. E. Monro, who subsequently preceded the corpse to the grave (situated at the western extremity of the cemetery), into which the remains of the deceased's father had been removed yesterday morning from the catacombs. There were not less than four hundred persons present, and a deep feeling of grief appeared to pervade the whole assembly. Dr. Baly was unmarried, and has left two sisters to mourn his premature death.

On the 5th instant, the College of Physicians of Edinburgh presented their president, Dr. Alexander Wood, with his own portrait, and entertained him with a dinner. Of course, after-dinner speeches of this kind—the essence of which is necessarily modest self-glorification—must not be taken *au pied de la lettre.* We must, however, submit that the speakers, in laying the paint so thickly on their own virtues, would have done better not to have splashed their neighbours' premises so ungenerously and unseemly. Of Dr. A. Wood's merits no one can doubt. The College has never had a more energetic president: and through his energy some £10,000 sterling have been poured into the coffers of his College during the past year. Why, then, need he so abuse all that is not with him, when so much is with him? He might have been generous in his great hour of triumph at all events. Has the *surgit amari aliquid* of the Privy Council decision over-balanced him?

THE LATE WILLIAM BALY, M.D., F.R.S.

William Baly was born at Lynn, in Norfolk, in 1814. His father was in general business there, but occupied himself in literature, rather than in the pursuit of wealth: his mother was a lady of cultivated mind, with remarkable good sense and energy. He was educated in the Lynn Grammar School, and was apprenticed to Mr. Ingle (now Dr. Ingle of Emsworth), an active and esteemed general practitioner in that town. In 1831 he entered as a pupil of University College, and in 1832, at St. Bartholomew's Hospital. At the former he attended the lectures, and at the latter the practice, necessary for the usual diplomas of the College of Surgeons and the Apothecaries' Hall. At both schools alike he distinguished himself by earnest and successful work: but at the end of his pupilage, he attached himself to the one which he had selected for the practical studies for which he had the most affection and the most capacity.

Among all his works, that to which he devoted himself with the greatest zeal was clinical medicine; and in this his chief teachers were Dr. Latham and Dr. Burrows, who, even then, observed so much of good promise in him, that they advised him to prepare to venture on the life of a physician in London. Accordingly in 1834, after passing the College of Surgeons and the Apothecaries' Hall, Baly went to Paris, and, after a winter's study there, to Heidelberg, and thence to Berlin, where he graduated as Doctor of Medicine in 1836. On his return to England, he started for practice in Vigo Street.

A year later, and while holding for a short time the post of Medical Officer to the St. Pancras Infirmary, he lived in Devonshire Street. For the next five years he lodged in Brook Street. A great portion of Baly's time, during the first four years that he thus spent in London, was occupied with the translation of Müller's *Physiology*, a task which he executed with the same scrupulous care as he gave to all his later work. For he not only rendered the German into better English, but he thoroughly studied and literally worked through the book, repeating many of the observations it described, and examining many of its doctrines. If the notes which he was thus enabled to add to the work could have been published separately, they would have justly gained for him the reputation of being an expert and original physiologist. This was the more remarkable, because he undertook the work with no special love for physiology, and with no design of making it his pursuit in life. His chief motives were, that the work offered him the means of earning some money, and of honestly displaying the power with which he was prepared to enter on the contest of his life—and the power he displayed made everyone feel as sure as his first teachers had long felt, that his place, some day, would be among the highest in his profession.

In 1840, through the recommendation of Dr. Latham, Baly was appointed to visit and report on the state of the Millbank Penitentiary, where dysentery was very prevalent. This led, in the next year, to his appointment as physician to that establishment.

This post was of immense advantage to him. It gave him sufficient means of living, while he had very little private practice; the number of sick under his care was often large, their diseases had peculiar interest, and he was brought into contact with Government officers, many of whom could appreciate his trustworthiness and rare ability.

Indeed, it afforded a remarkable proof of the excellence of Baly's mind that, for the nearly twenty years during which he held this appointment, and among all the changes to which the prison was subjected, in its discipline and purpose, and in all the varieties of administration under successive Home Secretaries, inspectors, and governors, he was always well esteemed, always trusted, and very generally referred to as a principal medical adviser of Government on questions of the hygiene of prisons.

The chief results of his studies at the prison are comprised in his numerous reports; but more especially in a most elaborate paper on the "Diseases of Prisons," in the twenty-eighth volume of the *Medico-Chirurgical Transactions*; and in his Gulstonian Lectures on "Dysentery," published in 1847. To the same studies, also, may be referred much of the knowledge displayed in his "Report on Cholera," written at the desire of the College of Physicians.

In 1841, Dr. Baly became Lecturer on Forensic Medicine at St. Bartholomew's Hospital. The sole ground of his election was that they with whom it rested to recommend for the appointment were convinced of his high merit, and that he would add largely to the reputation of the school. He held the lectureship for fourteen years; and though, as his simultaneous work at the prison showed, he never forgot that the real business of his life was in practical medicine, yet he worked at the lectures as if they were his chief duty, and their subjects those in which his skill was to decide all his success. It was an admirable instance, either of his simple devotion to duty for its own sake, or of his wise conviction that duty, wherever done, will somewhere find its full reward.

In 1846, Baly was admitted a Fellow of the College of Physicians; in 1847, a Fellow of the Royal Society; in 1854, he became Assistant-Physician to St. Bartholomew's Hospital; and in 1855, in conjunction with Dr. Burrows, Lecturer on Medicine there. He was now fairly in the tide of practice, with every prospect of attaining high reputation as an hospital physician, and of multiplying a hundredfold the value of his knowledge by diffusing it among his pupils. But he was to be yet more eminent, his influence yet larger. In 1859, a physician was required, who might share with Sir James Clark the office of regular attendance on the Queen and Royal Family. Those who were charged to make a just selection for this high office, consulted free from all personal regards, from all solicitation and undue influences they had the whole profession to choose from, and when, to Baly's great surprise, he was selected, the unanimous voice of the whole profession acknowledged that he was the fittest man. How well he justified the opinion was shown by the proofs of confidence which he received from the Queen and the Prince Consort, and by the esteem in which he was held in all the palace.

Thus had Baly risen, till the greatest honours of his profession seemed quite within his reach; more than his ambition might soon be satisfied; he appeared to stand firm, in the confidence of his Sovereign, in the high esteem of all his brethren, in the affection of many friends; the pride of sisters who had worked lovingly with him in his laborious days; he was glad in his success; brightened by prosperity; but, from all this happiness, in a moment, he was hurled to death—yet not to death; for they who knew his inmost mind are sure that, in the midst of this life, he was preparing himself for another and far better.

It will be asked hereafter—What was the secret of Baly's singular success? Truly, there was no secret in it. He had excellent intellectual capacity, and great working power; he was very prudent, gentle, true-hearted, and virtuous; and he daily cultivated and used all his powers with the single view of doing the best he could in the daily duties of his life.

His intellectual strength was not in any one mental power, but in the fair proportions of them all. He had keen senses: very clear observant power, great caution and sobriety in thinking; an excellent ability in analysis. Few could sift facts better than he, or bring them out with more clearness and simplicity; he was eminently clear-headed.

And all that he did, his practice and his lectures, his writings and his conversation, represented this character of his mind; all was clear, simple, definite, and orderly.

An excellent feature in his disposition was a corresponding simplicity and sincerity of heart. He never professed to be what he was not; nay, he never professed himself what he was. He did well, without any self-assertion; he always seemed content to do his duty without any express seeking for its reward. Doubtless, among the motives that impelled him to a laborious exertion of his powers, ambition had some place; but his ambition was happily tempered by a natural timidity, which made him always prudent. Hence, probably, it was that he never committed the faults of mere ambition; he never wasted time or power in striving after things which he was unfitted for or unlikely to attain; he never sought for praise or reputation in pursuits that were alien from his proper work. And when his ambition was gratified, he had the same prudent fear lest he should fall short of the full discharge of the responsibilities which high station and opportunities of doing good brought with them. To the last he never made light of duty; he never thought it easy to do well; he did not presume that he had yet done his best; he seemed to think that there was in store some far better thing for him to do.

It will readily be believed that Baly was very popular among his pupils and professional brethren. His popularity, like his success, came to him without being expressly sought. It was the natural result of his honesty, gentleness, and liberality; and it increased with his merits. He tolerated kindly the faults of others. He saw them, indeed, very plainly; but he never resented them. He spent his life without a controversy; and among the crowds that followed him to his grave there were many who had loved him and rejoiced in his prosperity, though he was their successful rival.

These were the plain reasons of Baly's prosperous career; and the best lesson which our profession may read in his life—though not safely till they have well studied the solemn lesson of his death—is, to believe in the sufficiency of intellectual and moral excellence for the attainment of great success. He was entirely without those external advantages which men are too apt to regard as indispensable to the gaining of professional eminence. He entered the profession by the broad and most frequented road. He started in the crowd, with neither wealth nor costly education; he began life without any advantages of social position, without an influential friend; he had no brilliant genius, no lucky gift of cleverness; yet his career was a constant success, and in its course he gained and learned to use as many of these aids to progress as he desired. He constantly cultivated and adorned his mind; and he made and retained friends in every rank of life—literally, from the prison to the palace.

J. P.

DR. BROWN-SÉQUARD'S

GULSTONIAN LECTURES

ON THE

DIAGNOSTIC VALUE AND MODES OF PRODUCTION OF THE VARIOUS SYMPTOMS OF DISEASES OF THE BRAIN.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS,
FEBRUARY, 1861.

The first of the Gulstonian Lectures for the present year was delivered on Wednesday last, by Dr. Brown-Séquard. After making a few introductory observations on the importance of the subject he had chosen, in regard to medical science and practice, and stating that he would limit himself to the most practical side of the question, avoiding all details of theory except where necessary for elucidation, he proceeded to define what was the principal view that he intended to maintain, and, perhaps, to establish.

It is well known, he observed, that a portion of the brain (*i.e.* of the cerebral lobes) may be totally destroyed, without the production of any symptoms: and also, that in other cases a similar injury may be followed by the appearance of the most varied groups of symptoms, consisting of lesions of the senses—loss or exaggeration; of lesions of motion—convulsions or loss of muscular power; or of disturbances of the intelligence. Hitherto, as far as the lecturer knew, no explanation has been given of the great variety thus presented. The commonly received view is, that a local injury to the brain causes paralysis, or any of the other symptoms, as a direct result: for instance, when a man is found to have hemiplegia of the left side, with an alteration in the middle cerebral lobe of the right side, the lesion of the brain is said to be the cause of the paralysis. But how can this be, seeing that such a lesion in one person produces hemiplegia, in another no symptoms whatever, and in fifty others as many different symptoms? He would endeavour to show how, on the one hand, an injury of any part of the cerebral substance may produce either no symptom or a great variety of symptoms; and that, on the other hand, the various symptoms accompanying injury of the brain may also be produced by affections of distant parts, without any visible alteration in the brain itself.

The latter statement might appear to involve a contradiction. How, it might be asked, can symptoms produced by distant injuries be also symptoms of diseases of the brain? This apparent contradiction is to be reconciled by regarding the parts of the cerebral lobes, when diseased, as being capable of affecting the parts at the base of the organ in the same way as the latter are affected through any other part of the body that is provided with nerves. Thus the cerebral lobes may have just the same kind of influence—probably of a reflex character—as is possessed by the skin and mucous membranes, and also by the cerebral membranes themselves when diseased.

The plan of the course was then sketched out. The lecturer stated that he would first endeavour to show that many causes, arising either in states of the blood or in irritation of various organs, may produce not only individual symptoms of brain-disease, but also groups of symptoms often sufficient to lead to the diagnosis of disease of the brain itself; for instance, that hemiplegia may not only depend on disease of the brain, but also on conditions of the blood, or on irritation propagated from other organs. He would then show that various diseases of the brain, especially of the anterior and middle lobes, may present either no symptom or a great variety of symptoms: and he would point out how, in some cases, both the locality and the nature of the disease in these regions may be detected. After this, he would go over the same ground with regard to the corpora striata and the optic thalami, and the parts at the base of the brain, especially the pons Varolii; and would conclude the course by summing up the diagnostic and therapeutic value of a knowledge of the principal symptoms.

Symptoms of disease of the brain may arise from various conditions, which may be arranged under seven heads:—1. Insufficient supply of blood to the brain; 2. Alteration in the quality of the blood; 3. Increased supply of blood to the brain; 4. Inflammation of the brain or of its membranes; 5. Concussion and other mechanical injuries; 6. Excess of cerebral action through the influence of the soul; 7. Moral causes.

The first three groups of conditions were then noticed. Insufficient supply of blood to the brain may arise from contraction of the cerebral vessels through reflex action. This is most probably the real cause, in many cases where injury of distant parts produces symptoms of brain-disease. The lecturer had seen many instances which supported this view. The contraction of the blood-vessels under reflex action is a most important phenomenon; and, without entering fully into details, he would bring forward two or three facts in proof. Dr. Tholozan and himself had ascertained that, on plunging one hand into cold water, the temperature of the other hand is perceptibly lowered, generally by six or eight degrees Fahrenheit, and sometimes by twenty degrees. Again, if the sensitive nerves of the face of an animal be irritated under certain conditions, the animal loses consciousness, and manifests all the symptoms of epilepsy; these phenomena being, without doubt, connected with contraction of the cerebral vessels. Perhaps, also, the commonly observed effects of a blow on the stomach are due to the same cause; but the best proof of reflex action in the supply of blood to the brain is afforded by the experiment on animals just now mentioned. Many other facts might be brought forward to illustrate the production of reflex action on the blood-vessels of the brain. Every physiologist now, indeed, admits this influence.

The supply of blood to the brain may also be interfered with by causes diminishing the size of the cavity, such as effusions of serum, projections of bone, tumours, etc.; or by obstructions to the circulation of the arterial blood, as tumours pressing on the course of the vertebral or internal carotid arteries. After loss of blood, also, there is a diminution in the amount of blood in the brain, as has been demonstrated by Dr. Burrows, and corroborated by Kussmaul and Tenner. There are also other causes, of a more complex character.

One cause of great importance, interfering with the cerebral circulation, consists in the phenomenon first especially demonstrated by Dr. Kirkes, of a clot of blood being carried from the heart into the vessels of the brain. It may be, also, that clots are formed *in situ* in the cerebral vessels.

Alterations in the quality of the blood next came under notice. Merely calling to mind the diathetic and acute diseases, the lecturer observed that altered quality of the blood in the brain may also arise from an obstacle to the free return of venous blood. Carbonic acid retained in the blood has been shown to act most powerfully in producing convulsions; and the great cause of epileptiform convulsions is the irritation produced by the retention of carbonic acid in the vessels at the base of the brain.

The action of an increased amount of blood in the brain demanded no illustration; and the lecturer proceeded to another division of his subject.

It has been shown by physiologists that injuries of various kinds—as the application of heat or cold, cutting, etc.—may be inflicted on the cerebral lobes without the production of any symptoms. How is it, then, that in inflammation of the brain we find symptoms produced which irritation of the same parts of the organ has failed to elicit? It has been shown that several tissues of the body, which are insensible in their healthy state, become highly irritable when inflamed; and there is no tissue in the body which manifests this property in so high a degree, or is so liable when inflamed to produce convulsions, as the dura mater. In the same way, the brain itself, or the grey matter of the spinal cord, is insensible to irritation when healthy; but if either be irritated when in an inflamed state, symptoms are forthwith produced.

What are the symptoms of inflammation of the brain? This question is important, both as to diagnosis and as to treatment. A man has an effusion of blood in the brain: the symptoms at first are those of pressure merely. The patient has paralysis; but he has no convulsions, nor referred sensations, nor pain in the paralysed limb. In a few days, however, prickings, formications, and all the symptoms which attend myelitis, are manifested in the paralysed member. These new symptoms arise from inflammation of the brain, and nothing else—unless the cause be located altogether elsewhere than in the brain.

The term "referred sensations" demanded explanation. There is, the lecturer said, a capital distinction to be observed between true referred sensation and other painful impressions of which patients complain. If pain in the paralysed limb occur independently of touch, or of contraction, or of shaking, or of any movement whatever of the limb, it is a referred sensation, having its origin in the brain. Its analogue is presented in the sensation produced by irritation of the ulnar nerve: in the one case the sensation is in the trunk of the nerve, in the other it is in the brain, and in both it is referred to the periphery.

This true referred sensation is to be distinguished from another kind of pain felt in many cases of hemiplegia, and which depends on irritation of the vasomotor nerves. Irritation of any part of the nervous centres may produce its effects in four directions, viz., on the mind, on motion, on sensation, or on the vaso-motor nerves—the nerves regulating nutrition being included under this last term, as well as those which regulate the blood-vessels. As consequences of the irritation of the vaso-motor nerves, there may be disturbances of the temperature of parts, or of nutrition, or of sensation. The pain thus produced is especially felt in the joints; it may be experienced also in the middle of muscles; but its distinctive character is that it is produced by movement or mechanical irritation of the limb.

A capital distinction requires to be made between the action produced on the vaso-motor nerves by disease of the nervous centres, and that originating in the periphery. If, for instance, the irritation arise in the bowels (as from worms) there may be disturbance of the nutrition of some remote part; or a person having neuralgia in one arm may be affected with progressive muscular atrophy of the opposite limb (not, however, that this vaso-motor lesion is the only cause of the progressive muscular atrophy). Here the action in the vaso-motor nerve is reflex. Again, in a case which had come under the lecturer's notice, a boy, on placing his foot on the floor in getting out of bed, was attacked with epileptiform symptoms. The only lesion that could be detected was a slight injury near the nail of the great toe; but the phenomena manifested were the result of a change in the nutrition of the brain—of an alteration in the action of the vaso-motor nerves of the organ—induced in a reflex manner.

Illustrations of the effects produced on sensation by reflex action probably often exist without being noticed, one of the most common being the pain in the forehead produced by taking cold water or ice. And the lecturer stated that he knew a lady who cannot bear a draught of air on her neck, as she is immediately seized with severe pain in the limb of the opposite side.

Progress of Medical Science.

ABSCESS OF THE LIVER. M. Rouis, Surgeon-Major of the First Class to the Military Hospital of Strasbourg, has just published an excellent monograph entitled *Recherches sur les Suppurations Endémiques du Foie* (Paris, 1860, 8vo, pp. 456), giving the results of eleven years experience in the climate of Algeria. The subject is considered under the various heads of pathological anatomy, symptoms and progress, modes of termination, duration, convalescence, complications, prognosis, diagnosis, causes, and treatment. An analysis is given of 203 cases of hepatic abscess which came under the author's own observation, and the history of 40 of the cases is recorded in detail. Of the 203 cases, 162 proved fatal, 2 made an imperfect recovery, and 39 recovered completely. From this it would appear that four out of every five cases died. In 179 cases, or about nine-tenths of the entire number, the abscess in the liver was preceded or accompanied by dysentery. Of the 203 cases, the pus escaped from the liver in various directions in 50; and of these 50 cases, the abscess burst into the bronchi in fifteen, into the peritoneum in fourteen, eleven times into the right pleura, five times into the stomach, three times into the transverse colon, once into the duodenum, once into the pericardium, once into the gall-bladder, and once into the bile-ducts. A remarkable circumstance, which, however, has been noticed before, was that, of the cases where the abscess burst into the bronchi, almost as many recovered as died. Bursting of an hepatic abscess into a bronchus is, therefore, on the whole, a favourable occurrence. The pathology of hepatic abscess is discussed with great minuteness and ability. The pus contained in the abscess is described as being usually of a yellowish-white colour, like that from an ordinary phlegmon; but in some cases it presented a claret or chocolate colour, owing to the admixture of blood-globules or the *débris* of the hepatic tissue. In the case of old abscesses, it often exhaled a peculiarly fœtid odour. Some excellent observations are made upon the subject of treatment, and more especially upon the propriety of evacuating the abscess by external incision.

The Climate of Algiers. Dr. Prosper de Pietra Santa, who for the last twenty-two years has resided in Algeria, in a lengthened communication to the editor of the *Union Médicale*, speaks of the climate of the country as possessing a happy medium between a temperate and a tropical climate, and recommends it as specially adapted for patients labouring under pulmonary consumption and chronic diseases of the chest. Among other good qualities of the climate, are mentioned the following:

1. Great purity of the atmosphere, and a blue, cloudless sky.
2. The absence of any great alternations of temperature, either daily, or at different seasons of the year. The mean annual temperature is 66.5° Fahr.
3. Very small daily or annual oscillations of the barometric column.
4. A moderate amount of moisture in the atmosphere.
5. A certain periodicity of winds and rain. (*L'Union Médicale*, Dec. 11th, 1860, p. 514.)

Pathology and Treatment of Goître with Protrusion of the Eyeballs. This malady, of which an example was recently brought before the Royal Medical and Chirurgical Society of London by Dr. Handfield Jones, has been made the subject of a clinical lecture at the Hôtel Dieu, by Professor Trousseau. The affection is shown to be totally different from true goître. As regards its pathology, it is maintained that it is not owing, as many have thought, to any dyscrasia or abnormal condition of the blood, but that it is entirely a nervous malady. The palpitations, the enlarged thyroid, and the protruded eyeballs, which are the three chief characteristics of the malady, are thought to be due to local congestions, brought about by deranged nervous action. In corroboration of this view, many physiological and morbid congestions, having their origin in the nervous system, are appealed to. This view is strengthened by the paroxysmal character of the malady. Among the pathological appearances, it is stated that the thyroid arteries are found enlarged and tortuous. One case is mentioned where the ophthalmic artery was also observed to be entangled; but careful observations with the ophthalmoscope, as to the degree of congestion of the eyeball, are still wanting. In Trousseau's opinion, however, the protrusion of the eyeballs is due to congestion, and not, as has been maintained by Stokes, to dropsical effusion. The liver and spleen are usually found enlarged and gorged with blood; and cases are spoken of where a fatal termination had been brought about by extravasation of blood into the meninges of the brain, or by hæmorrhage into the stomach and intestines. In reference to treatment, it is shown that iodine and its preparations, which are attended by such signal benefit in the treatment of true goître, are here worse than useless. According to Trousseau, their employment is apt to bring on an exacerbation of all the symptoms, and is fraught with much danger. Steel and its preparations are also objected to; and the opinion is expressed, that in those cases where benefit has appeared to follow their use, the good effects have been due to the circumstance of the steel having been given in combination with digitalis. The treatment recommended by Trousseau consists in abstraction of blood, drastic purgatives, digitalis in large doses, and the application of ice to the enlarged thyroid. His objects in abstracting blood are, to relieve the congestion of the thyroid, to quiet the palpitations, and to avert asphyxia. The digitalis is prescribed in large doses; from eight to ten drops of the tincture are to be given every hour, until the pulse is reduced from 110 or 120, which it generally is during a paroxysm, to 70 or 80. When, notwithstanding the employment of all the remedial measures already mentioned, suffocation is imminent, tracheotomy must be had recourse to. In performing tracheotomy, there is great danger of death from hæmorrhage during the operation, should an incision be made into any part of the extremely vascular thyroid. To obviate this, Trousseau advocates a plan of performing the operation recommended by Demarquay, and which consists in dividing all the soft parts by means of the écraseur, after which an incision can be made into the trachea with a bistoury. (*L'Union Médicale*, 1860, pp. 485, 500, 513.)

Case of Incised Wound of the Spinal Cord. A case of incised wound of the spinal cord, which recovered, was recently under treatment in the Hôtel Dieu. The patient was a boy 15 years of age, who received a wound from a cutting instrument in the back, which penetrated between the tenth and eleventh dorsal vertebræ, and probably divided the right half of the spinal marrow. There was complete paralysis of motion, and incomplete loss of sensibility of the right thigh and leg. The patient made a good recovery, and, at the end of two months, was able to walk four or five miles. A remarkable symptom in this case, which has been often noticed before, was the quantity of cerebro-spinal fluid which escaped by the wound during the first twelve days after the receipt of the injury. It consisted of a limpid fluid, like water; and its quantity at first was so great as to saturate all the clothes. In another case which is alluded to, the cerebro-spinal fluid which flowed from the wound saturated the dressings and even the mattress, so that for several days the patient's bed had to be changed night and morning. (Rap. de la Société de Chirurgie, *L'Union Méd.*, 1860, p. 525.)

Aneurism of the Basilar Artery. A soldier died suddenly, some months ago, in one of the hospitals of Genoa, from the rupture of an aneurism of the basilar artery. The aneurism was of a fusiform shape, and involved the entire vessel from the junction of the vertebrals to the origin of the posterior cerebrals. A large quantity of clotted blood was found beneath the arachnoid. There was likewise disease of the heart and great vessels. (*La Liguria Medica*, 1860.)

Needle traversing the Body. A Spanish medical journal gives the details of a case where a girl, 14 years of age, swallowed a needle upwards of two inches in length, which some months afterwards escaped at the left groin. During the passage of the needle, the patient suffered from severe gastric derangement, emaciation, and prostration. (*La Espana Medica*, 1860.)

A New Caustic for Toothache. The following treatment is recommended by Dr. Calvy of Toulon, for the neuralgia proceeding from curious teeth. The carious cavity is first to be cleaned out, and then a piece of cotton, steeped in a solution of six grains of acetate of morphia in an ounce of nitric acid, is to be applied to its interior. As soon as the caustic penetrates into the carious tooth, the pain ceases, and the patient is cured. After the application of the caustic, the cavity should be filled with cotton steeped in the sedative solution of opium, and afterwards permanently plugged. (*Gaz. des Hôpitaux*, Jan. 10th, 1861.)

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, January 7, 1861.

E. H. Greenhow, M.D., in the Chair.

ON THE INFLUENCE OF CONTAGION IN THE RISE AND THE SPREAD OF EPIDEMIC DISEASES.

BY G. MILROY, M.D.

The term contagion is used to designate the communicability or transmissibility of a disease from a sick person to a sound person; the transmission either being direct and immediate from the sick to the well, or occurring through the intervention, and it may be by the conveyance to a great distance, of an object which has become infected with the *materies morbi*.

The simplest kind of contagion is that where a disease is communicable in one way only; viz., by the transmission of a palpable poisonous matter conveyed from the body of a sick person, and applied either immediately to the body of the healthy person, or through the medium of any thing which has been in direct contact with the sick, as his bed- or body-clothes. The itch, some forms of porrigo, syphilis, gonorrhœa, and hydrophobia, are in this category. The idea of the atmospheric dissemination of the poison of any of these diseases is scarcely recognised in the present day, although in former times it was widely entertained in reference to one at least of them, as mentioned in Dr. Simpson's paper on syphilis, read at the first meeting of this Society during the present session.

Do any of the above diseases occur spontaneously; *i.e.* quite independently of all discoverable transmission of the poison from an antecedent case? and if such be the fact, what proportion do such instances of self-engendered disease bear to the instances of contagious propagation? The question of the generation *de novo* of diseases, which may afterwards propagate themselves from the sick to the healthy, is a difficult one; but it is obvious, that it must be fairly and minutely looked into in all attempts to investigate the influence of contagion on their development and diffusion. It seems more than probable, that some at least of the diseases mentioned may thus arise. For example, the occurrence of hydrophobia *de novo* in the canine race can scarcely be doubted; if so, a remarkable illustration of the new development of a specific contagious poison is at once presented to our notice. What is true of one, may reasonably be presumed of some others. Besides this, are there not some grounds for suspecting that the poisonous matter of one or more of the diseases already enumerated may at times be transmitted from infected to sound persons, without direct or indirect contact with the palpable virus, and through the agency of *atmospheric dispersion?* In the case of gonorrhœal and other kinds of purulent ophthalmia, it has been more than once remarked, that a simple visit to a ward where a number of patients with the disease have been congregated, has occasionally been followed by an attack of the malady, when every precaution has been taken to avoid contact with the sick or with any articles near them.

Whatever doubt there be as to the twofold mode of transmission of any of the preceding diseases, there are some diseases which are certainly communicable in both ways; viz., by direct and palpable contact or application, and also by atmospheric dispersion of the *materies morbi*, and its absorption into the system either by the skin, the lungs, or the alimentary passages. Smallpox obviously belongs to this class. The terrible epizootic disease of glanders, according to the best veterinarian authorities, is another illustration. The true or oriental plague was, in the time of Dr. Mead, when he wrote his celebrated *Essay on Pestilential Contagion*, and for forty or fifty years subsequently, generally considered to be transmissible in both ways; the contactual, and the effluvial or atmospheric. In the last quarter of last century, and until within twenty-five or thirty years ago, the strange belief that the plague was communicable only by direct contact, and never by atmospheric dissemination, held possession of the schools. Since the scientific investigation of the disease in the epidemic of Egypt, during 1834-35, the nature and mode of action of the contagion of the plague have been proved to be quite similar to the contagion of typhus fever. In other respects, too, the two diseases have been shown to be closely allied in their predisponent, exciting, and favouring causes, and to be controllable by the same sanitary and hygienic means.

Are such diseases as glanders, the plague, and typhus liable to occur quite independently of antecedent cases? —in other words, are they liable to become developed *de novo?* Few, if any, physicians in the present day will doubt that typhus is continually occurring spontaneously, under certain tolerably well-known conditions, and apart from all suspicion of transmission from previous cases. Dr. Murchison has recently contributed some valuable papers illustrative of this subject, and has greatly strengthened the conclusions of former writers.

The most experienced veterinarians are agreed, that glanders is both a self-engendered, and also a contagious disease. The lectures of the late Mr. Youatt afford important evidence. Like typhus, glanders is a disease which happily is much under the control of judicious hygiene. If not the offspring, it is at least the foster-child, of filth, overcrowding, and neglect.

That the plague is liable to be developed *de novo*, is proved beyond doubt by its recent appearance on the Barbary Coast, after an absence of many years in that district, and while the disease was altogether unknown in any other part of the Ottoman or other dominions.

That yellow fever is under certain circumstances of insalubrity apt to manifest contagious properties cannot be reasonably denied, as in the case of the *Eclair* at Boa Vista, and in the prison-hulk, etc., at Bermuda, in 1853, as well as in other instances. In pure dwellings, with attention to cleanliness and due ventilation, the contagiousness of the disease ceases to manifest itself. In upwards of a thousand cases treated in the quarantine hospital at New York, no instance occurred of discoverable communication from the sick to the sound.

The contagious power of malignant cholera seems to be as much feebler than that of yellow fever, as its power of migratory diffusiveness is greater. Transmission from person to person has certainly been noted, not unfrequently in limited groups of cases, occurring generally in poor unventilated rooms, or in overcrowded wards of hospitals, lunatic asylums, etc.; but the general spread of the pestilence in a community, is as certainly not explicable in such a manner. Personal contagion plays but a small and subordinate part in its diffusion.

That both the yellow fever and the cholera every now and then become developed *de novo*, in certain climates and regions of the world, can scarcely be doubted by any one.

The contagion of influenza in a limited and partial degree is recognised by most writers on that disease. In the *Annals of Influenza*, published by the Sydenham Society, the evidence is fairly stated.

That certain kinds of angina or cynanche are also to some extent transmissible in this way, is generally admitted; and the recent inquiries respecting diphtheria by the Privy Council, and by the Epidemiological Society, have served to show that this disease is occasionally contagious, although contagion cannot be regarded as the principal, far less the only cause of its spreading.

Dysentery affords a well marked instance of a disease which, not primarily communicable, is apt to become contagious under circumstances unfavourable to healthy existence. That it is generable *de novo* is beyond doubt. Dr. Latham's report on Milbank Penitentiary affords strong evidence on both points.

Erysipelas also belongs to the same category. Certain forms of puerperal fever are among the most communicable of all fevers; their history affords much subject of illustration to the present inquiry. The best ascertained facts have been well stated by Dr. Tyler Smith.

The exanthemata are the only diseases which remain to be noticed. No one can dispute the eminently contagious property of these fevers, and of hooping-cough, generally associated with them. The power of transmissibility from the sick to the sound, belongs more essentially and inherently to these diseases than to any others. They have moreover other features which distinguish them, as respects the age of life when they usually appear, the infrequency of second attacks, etc., etc. Their development and spread are certainly much less under the control of sanitary measures than most of the other diseases mentioned, they being on the whole more independent of *places* or localities than the latter, and dependent rather on *persons* or individual diatheses.

Do any of them ever occur independently of antecedent cases? Perhaps not; but this question has not been examined in all its details with sufficiently searching care. Hooping-cough has certainly appeared in some countries when it would be difficult to trace its origin, and it is a curious circumstance, that varicella seems to occasionally manifest itself in the same way.

In conclusion, Dr. Milroy strongly urged the importance of far greater exactitude and comprehensiveness in observing and recording facts respecting the development and diffusion of epidemic diseases than have generally been adopted.

A discussion followed the reading of this paper, in which Dr. Patrick Fraser, Dr. Greenhow, Mr. Radcliffe, and Dr. McWilliam took part.

Correspondence.

BRANDING IN THE ARMY.

Letter from G. R. Dartnell, Esq.

Sir,—Amongst the editorial articles of the British Medical Journal for the 12th inst., is one on the subject of marking for desertion in the army; on which, as it seems to have been written under misconception, and from want of a full knowledge of the subject (which I am sure the writer would wish to possess), I beg to offer a few remarks, the article in question being calculated to mislead those who are unacquainted with the true facts of the case.

1. The soldier is not "branded and disfigured with a hot iron."

2. The marking with the letter D, is not, and never was, intended as a "punishment" for the offence of desertion.

3. It never was, either "nominally," or virtually, "the business of the surgeon to perform the operation."

The instrument still used, I believe, in the operation, is one invented by Mr. Tufnell, of Dublin, some eighteen or twenty years ago. It precisely resembles, in shape, size, appearance, and principle, the scarificator of a cupping apparatus; being armed, however, with a set of small needles (instead of lancets) arranged in the form of the letter D. The instrument is placed on the naked skin, immediately below the left axilla; the spring is touched, and the needles are instantly projected into the integument to the depth, probably, of the sixteenth of an inch; the little bleeding points are then quickly rubbed over with gunpowder, made into a thickish ink with water—the whole process not occupying necessarily more time than it takes to write these few lines. The person charged with the performance of the operation, is the regimental drum-major, a medical officer being generally present as the soldier's protector against any undue infliction of pain.

From the above description you will see, I think, that the court-martial sentence alluded to cannot in any way be considered a "punishment;" indeed, the pain from marking with the letter D is less (being a much less tedious process) than that of tattooing the arms and other parts of the body, to which soldiers and sailors are so fond of submitting voluntarily under the hands of skilled comrades, or which is practised by the natives of New Zealand and other islands in the Pacific.

The object in marking with a D, is simply that of identifying a deserter when apprehended, or brought up again for examination as a recruit, and as a protection against the readmission into the service (should he have been discharged) of a man of indifferent character, as a deserter from his regiment usually is.

You will feel assured also, from what I have here detailed, I think, that the marking the deserter in this way, is neither "brutalising" nor "degrading," nor in itself "an indelible disgrace." The offence committed is the disgrace, and a very great one, as it is surely a very grave offence for a soldier to desert his colours—it may be, his country in an hour of need; to perjure himself by breaking his enlistment oath; and to commit a civil felony, as he very frequently does, by carrying off with him clothing, and often other articles, not his own.

The chief motives for a soldier's desertion must be either to give vent to a spirit of discontent or insubordination; or the hope of gain, in absconding to a foreign state, or by obtaining a second bounty by re-enlistment into his own, as vast numbers have done, to the great injury of the public service and the public purse.

From the observations I have made on this subject I hope you will not think that I am an advocate for punishments in the army. Those who know me personally, know that I am incapable of such a feeling. I have too much regard—I might say, affection—for soldiers, with whom I was happily associated for six and thirty years, ever to derive pleasure from seeing one of them suffer the pain and disgrace of a corporal punishment; and I hope still to see the day when even the comparatively small amount now sanctioned by law is done away with for ever. Much has been done of late to improve the condition of the soldier, and much which remains to be done, will I hope be accomplished; for, independently of the consideration due to the soldier from his financial value to the state, I will assert, without fear of contradiction, that, as a body, there is no more noble, humane, self-denying, non-complaining, and true-hearted a class of men in the world, than the brave and glorious soldiers of the British army.

I am, etc., Geo. R. Dartnell,
Inspector General of Hospitals.

Arden House, Henley-in-Arden, Jan. 29th, 1861.

THE CORONER'S COURT.

Letter from William Falshaw, M.D.

Sir.—I am glad that the "Crowner's Quest Law" has become at last a subject of discussion, and hope the matter will not be allowed to rest until some important result has been achieved.

With regard to the investigations—involving medico-legal questions—which have taken place in this neighbourhood of late, and with which I have been associated, I can safely affirm that it is the rule rather than the exception, for a jury to give a verdict in "direct opposition to medical evidence," and that a conclusion based upon mere probabilities is of great value as evidence.

But I am anxious to draw attention to the fact that the Coroner's Court is often a "court of review," its object being to quash medical certificates, and at the same time injure the reputation of a medical man.

I could give more than one instance in proof of this, but for illustration, I will select a case of poisoning by opium; for, while it will serve my purpose just now, it may at the same time be usefully compared with the so-called poisoning case at Chester.

A medical man a few miles from this place was requested to visit a woman aged about sixty years. He promptly attended, and as promptly discovered that she was under the influence of a narcotic poison. She was in a profound state of coma, and exhibited all the characteristic symptoms of poisoning by opium. The case was treated as such, but the woman died. At the earnest solicitation of the relatives, the medical man was induced to give a certificate, in which the death of the woman was ascribed to an overdose of opium. The body was interred a few days after death.

The following facts were well known: that the deceased had been ailing for several days, having had a bad cold; that she was in the habit of taking paregoric to relieve her cough; that on the day of her death the person who went to the druggist's shop for her medicine requested the young man who was serving, "to add a few drops of laudanum" to the paregoric, as the woman had had no sleep the previous night; and that this mixture was the last deceased ever took.

How many "drops" of laudanum were added to the paregoric can never be known. Suffice it to say, the mixture had the desired effect; the poor woman soon fell asleep, but it was a sleep from which she never awoke.

If the deceased had not been seen by a medical man, it is very probable that a coroner's inquest would not have been held.

The body of course was exhumed, not for medical inspection, but for the formal inspection of the coroner and the jury. It was not deemed worth while to have the evidence of the only individual who was competent to form a correct opinion of the case—*i.e.* the medical man—much less to engage the services of an analytical chemist. The jury, therefore, after taking the evidence of a few "interested witnesses," returned the verdict that the deceased "had died from natural causes." By this decision of the jury the medical certificate is virtually annulled.

A local newspaper gave a report of the proceedings of the inquest, and an intimation to its readers, in something like the following words:—"The inquest was held, in consequence of the medical man who attended deceased ascribing her death to poisoning by opium, but the jury, after hearing the *evidence*, thought differently," etc.

The newspaper announcement would produce on the minds of the public, who are very ignorant in matters of medicine, an impression that the medical man had committed a serious error in judgment: but, thanks to the coroner's jury, that mistake was discovered and rectified. As a natural consequence, there would be increased veneration for that glorious institution of the country, "the coroner's court." I am, etc.,

William Falshaw.

Ramsbottom, Jan. 29th, 1861.

ARTIFICIAL RESPIRATION.

Letter from Jonathan Toogood, M.D.

Sir,—The restoration of suspended animation in persons apparently drowned has been prominently brought before the profession lately, and the "ready method" of Dr. Marshall Hall seemed to be preferred before all others. The subject was introduced at the meeting of the Royal Medical and Chirurgical Society, on the 22nd of last month; and I learn by the report, that the superintendent of the Royal Humane Society, after a full trial of the method, became so satisfied of its inefficiency, that he felt justified in adopting the plan recommended by Dr. Silvester. I do not exactly remember what that plan is, nor have I at present the means of referring to it; but I believe that it does not materially differ from that which I published nearly forty years since, and reprinted in my '*Reminiscences of a Medical Life*,' in 1853. It is as follows;—

On the Resuscitation of "Still born children"—Cases of apparently still-born children are very common. The attempts to restore life are frequently ill directed, and not calculated to promote the object. It will be found that a very large proportion of children apparently dead born, may be resuscitated, if proper means be resorted to, and persevered in for a sufficient length of time; but the modes generally employed to restore life, such as immersing the infant in warm water, friction, and pouring stimulants down the throat, are not calculated to produce the effect intended, and if these means do not succeed after a short trial, all further attempts are abandoned. The plan which I always adopt, which has never failed where the child was living during birth, is very simple, and only requires perseverance. The following cases, under circumstances by no means favorable, which have been selected from a great many more, will prove the success of the plan recommended.

Case i. Grace White, a very weakly woman, far advanced in consumption, was seized in the morning with uterine hæmorrhage, which continued slightly till the evening, when I saw her; and, whilst standing by her bedside, the flooding increased with such violence, that I thought it right to deliver her instantly; the child was still born. As soon as I had removed it from the mother, and seen her safe from immediate danger, I placed a napkin over the child's mouth, and inflated its lungs through the mouth from my own, gently pressing out the air from the chest afterwards, and thus imitating natural respiration. After having continued this process for forty-five minutes, the child made a very slight attempt to breathe, and the face became slightly suffused; by persevering ten minutes longer, the free action of the lungs was established, and the child cried lustily.

Case ii. Sarah Holmes had been in labour a long time when I saw her. It was a presentation of the arm, and being her first child, it became very difficult to deliver her, as she was advanced in age, and the parts very rigid. The child was still born; but, by pursuing the same plan actively for three-quarters of an hour, animation was perfectly restored.

Case iii. This was a case of presentation of the funis; and, as the labour was very slow, the child was still-born, but was recovered by the same means in half an hour.

Case iv. The last case which I shall mention was such as to encourage the attempt at resuscitation under any circumstances; it was a case of twins. The second child presented with the head, before which a considerable portion of the funis had descended. The delivery was extremely slow, from the general weakness of the woman, who had been long in very bad health, and the child was born apparently quite dead. As the mother's situation was very critical, more than half an hour elapsed before any attention could be paid to the child, which had been imperfectly wrapped in a cloth, and placed in a chair in a room without a fire in very cold weather. The same plan, pursued for half an hour, restored the child perfectly.

Every thing in this last case was unfavorable to the restoration of the child; the mother's long continued disease, the circumstance of her having two children, and more particularly, the delay which took place before any attempt was made, during which time, the child was exposed in a room without a fire in the depth of a severe winter, with a partial and very slight covering. I am warranted by my own experience in recommending this attempt to restore suspended animation, and if the above plan of resuscitation be actively employed and steadily persevered in, I believe it will often be successful. I have never found anything necessary but the regular inflation of the lungs, which I do with my own mouth as described, and have generally observed the first symptom of returning life, to be a tremulous motion of the respiratory organs, the child next makes a slight gasp and feeble attempt to inspire, and the colour of the face changes. The inflation should then be made more quickly; and as the attempts to breathe increase, sal volatile, or brandy rubbed on the palm of the hand, and held over the mouth during the inspiration of air, will materially assist the recovery and have a better effect than pouring stimulants into the stomach.

It has always appeared to me that the first step towards recovery, should be to remove the collapse of the lungs, and that until this is effected, all other means are useless. I am, etc.,

JONATHAN TOOGOOD.

Annandale, Torquay, Feb. 4th, 1861.

[Our correspondent will be able to judge from the following description of Dr. Silvester's method, how far it resembles his own.—ED.]

"I. *To Adjust the Patient's Position.* Place the patient on his back, with the shoulders raised and supported on a folded article of dress.

"II. *To Maintain a Free Entrance of Air into the Windpipe.* Draw forward the patient's tongue, and keep it projecting beyond the lips. If the lower jaw be gently raised, the teeth may be made to hold the tongue in the required position. Should it be found necessary, the tongue may be so retained by passing a handkerchief under the chin and fastening it over the head.

"III. *To Imitate the Movements of Deep Respiration.* Raise the patient's arms upwards by the sides of his head, and then extend them gently and steadily upwards and forwards for a few moments. (This action enlarges the capacity of the chest by elevating the ribs, and induces inspiration.)

"Next, turn down the patient's arms and press them gently and firmly for a few moments against the sides of the chest. (This action diminishes the cavity of the thorax, and produces a forcible expiration.)

"Repeat these measures alternately, deliberately, and perseveringly fifteen times in a minute.

"IV. *To Induce Circulation and Warmth, and to Excite Inspiration.* Rub the limbs from the extremities towards the heart. Replace wet clothing by warm and dry covering. Occasionally dash cold water in the patient's face. These measures are perfectly compatible with the systematic performance of the imitation of the movements of respiration. A similar remark applies to the use of the warm-bath, if indicated in the case of a still-born child.

"*Explanatory Remarks.* RULE I. This posture is not essential; but in the position recommended the vital capacity of the chest is larger than in any other recumbent attitude. The bony framework of the chest is more free to move, and both sides can be expanded at the same time. This, in fact, is precisely the posture chosen by persons suffering from dyspnœa.

"RULE II. In this way the patulous orifice of the windpipe is raised and drawn forward, so that nothing intervenes between it and the natural channel of air through the nose. The tongue is entirely prevented from falling back into the throat, whilst the extent to which the windpipe is put on the stretch is clearly indicated. The pharynx also is sufficiently opened to allow of the removal of liquids, etc., from the mouth, nose, pharynx, etc., if those have not been completely displaced by previous suitable treatment."

Medical News.

ROYAL COLLEGE OF SURGEONS. The following gentlemen were admitted members on January 30th:—

Andy, Senjee Pulney, Madras
Belemore, Alfred John, Harlesden, Middlesex
Colah, Muncherjee Beramjee, Bombay
Davies, William, Frood Vale, Carmarthenshire
De Negri, Athenodore, London
Hume, Henry, Newcastle-upon-Tyne
Huntley, Robert Elliott, Howden
Hunter, Richard Henry, Tottenham
Johnson, Cuthbert Newington Hughes, Winchester
Leach, Abraham, Oldham
Leech, Daniel John, Manchester
Leeds, Thomas, Stretford, near Manchester
Lonsley, Oded. Reading
Martin, John, Liverpool
Olive, Eustace Henry, Hastings
Orme, Charles Edward, Avenue Road, St. John's Wood
Parson, Edward, Cutcare, Liskeard
Reilly, Frederick James, Mile End
Reynolds, Henry Fitzgerald, Hull
Savage, James. Bridlington Quay, Yorkshire
Winstanley, Clement, Exeter

Gentlemen admitted on January 31st:—

Goodman, Charles Rowland, Southport
Griffiths, Francis Thomas, Sheffield
Hooper, Robert William, Dublin
Howard, Edwin Philpot, Harley Street
Johnson, Alfred, York
Lovegrove, Washington, Tulse Hill
May, Joseph, Devonport
Rayner, Thomas Vernon, Stockport
Riordan, Denis Augustine, Middleton, co. Cork
Robinson, George, Bedford
Rolls, Thomas, Chipping Norton
Stewart, Henry Charles, London
Tanner, John, Ledbury
Thomason, William James, London
Thompson, Daniel Robert, Madras
Vanderstraaten, John, Ceylon

The following gentlemen, having undergone the preliminary examinations in Anatomy and Physiology, will be admitted to the pass examination for membership when eligible:—

King's College.

Antonini, Charles
Axford, W. H.
Buckmaster, C. A.
Cocks, C. C.
Hyde, Sidney
Melladen, H. T. L.
Moss, Charles
Packer, J. M.
Turner, Richard
Wilcox, R. W.

St. Bartholomew's Hospital.

Clarke, E. G.
Cocker, W. H.
Glover, W. J. S.
Griffith, W. T.
Mitton, M. J.
Peel, Robert
Potts, W. J.
Selwood, H. C.

St. Thomas's Hospital.

Allingham, J. H.
Colston, S. B.
Corbett, Thomas
Greene, F. W.
La Trobe, F. S.
Miskin, G. A.
Spencer, W. H.
Witherby, W. H.

Birmingham School of Medicine.

Baddeley, W. B.
Ballenden, J. H. M.
Cumming, S. McD.
Haswell, N. R.
Jones, Walter
Lathbury, T. A.
Macpherson, P. S.

University College.

Brereton, F. M.
Kempe, C. P.
La Mert, Lewis
Smith, George

St. Mary's Hospital.

Marris, Pryce
Nelson, C. E.
Nesbitt, Francis
Reed, Baynes

Guy's Hospital.

Penson, J. S.
Blasson, G. J.
Brown, A. G.
Passmore, T. H.

Madras School of Medicine.

Andy, Serjee Pulney
Lyons, William
Thompson, D. R.

Bristol School of Medicine.

Maurice, Benjamin
Michell, Sloane
Morton, S. M.

St. George's Hospital.

Leyland, L. S.
Sullivan, John

Galway School of Medicine.

Comerford, M. S.
Hooper, R. W.

Sheffield School of Medicine.

Macaulay, F. E.
Walker, Bernard

Edinburgh School of Medicine.

Agassiz, Alfred
Pole, Alexander

Cork School of Medicine.

Moriarty, T. B.
Riordan, D. A.

Newcastle School of Medicine.

Douglas, George
Todd, J. W.

Manchester School of Medicine.

Bradbury, Joseph
Roe, E. H.

Middlesex Hospital.

Hursley, John

London Hospital.

Lawrence, F. G.

Aberdeen School of Medicine.

Moore, Henry

Charing Cross Hospital.

Bonney, Francis

York School of Medicine.

Cooper, W. H.

Westminster Hospital.

Smith, W. T.

Apothecaries' Hall. On Thursday, January 31st, the following licentiates were admitted:—

Bennet, W. F., Bath
Caldwell, W. T. D., Kennington
Colquhoun, A. G., Riscley
Edwards, W., Bampton, Devon
Harve, C. H.
Hollinworth, J., Newton Moor, Cheshire
Hume, H., Newcastle-on-Tyne
Huntley, R. E., Howdon

APPOINTMENTS.

*Hill, Alfred, M.D., appointed Analyst for the Borough of Birmingham under the Adulteration Act.

Southey, R., Esq., son of Dr. Southey, appointed to the Radcliffe Travelling Fellowship.

Royal Army. The following appointments have been made:—

Ivey, W. F. T.. Esq., Staff-Surgeon, to be Surgeon 6th Foot, *vice* G. Hyde, M.D., retired on half-pay.

Royal Navy. The following appointments have been made:—

Bradley, James, Esq., Acting Assistant-Surgeon, to the *Impregnable*, for Plymouth Hospital.

Olive, Edward, Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.

Redmond, William, Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Nunn, R. S., Esq., to be Surgeon 1st Administrative Battalion Essex R.V.

Wilton, J. P.. Esq., to be Assistant-Surgeon, Royal South Gloucestershire Light Infantry Militia.

To be Honorary Assistant-Surgeons:—

Cautley, J., Esq., 10th Company East York R.V.
Cowper, J. A., Esq., 10th Forfarshire R.V.
Gemmel, J., Esq., 7th Argyllshire R.V.
Hicks, T., Esq., 1st Gloucester Engineer Volunteers.
Wallen, W. S., Esq., 23rd Company Surrey R.V.

BIRTHS.

Of a son, the wife of—

*Cockey, Edmund, Esq., Frome, on January 21.

DEATHS.

Anderson. On February 4, at Glasgow, aged 6, Frederick Thomas, second son of Dr. T. Anderson, Professor of Chemistry in the University of Glasgow.

Bentley, Edward, M.D., at Hackney, aged 43, on February 2.

Bonnelat, Dr., Physician to the Hospital of St. Amand, department of Cher, aged 87, lately.

Brown. On January 27, at Mortlake, Mary, wife of Henry Brown, Esq., Surgeon.

Fowke, Thomas H., Esq., Surgeon, at Graisley, near Wolverhampton, on January 24.

Gama, Dr., formerly Surgeon of the Hospital Val-de-Grâce, at Vaurigard, aged 86, lately.

Hartung, Dr., at Strasburg, lately. He had been in practice since 1812.

*Lanyon, Edward, Esq., at Camborne, Cornwall, on January 21.

Macker, M., the oldest practitioner in the department of the Upper Rhine, at Colmar, on January 15.

Moore. On February 6, at 15, Queen's Road, St. John's Wood, aged 77, Mary, widow of the late Daniel Moore, Esq., Surgeon, of Ilford.

Morris. On January 31, at New Cross, Louisa, widow of Harvey Morris, Esq., Surgeon R.N.

Oxley. On January 29, at Kyre House, Worcestershire, Lucy Caroline, wife of Thomas Oxley, Esq., Bengal Medical Service, retired.

Salusbury, John, L.R.C.P.Ed., at Conway, on January 20.

Tiedemann, Dr., the celebrated German physiologist, at Munich, aged 87, lately.

Van Vaerenbergh, M., the senior medical practitioner in Antwerp, aged 84, lately.

Wood. On February 2, at 54, Upper Harley Street, Charles Arthur, infant son of *W. Wood, M.D.

University of Edinburgh. The Privy Council has confirmed the Report of the Commissioners relating to the granting of Degrees in Medicine and in Surgery by the University of Edinburgh.

The Hunterian Oration. Mr. William Coulson, surgeon to St. Mary's Hospital, will deliver the annual Hunterian oration, in the theatre of the Royal College of Surgeons, on Thursday next, February 14th.

Sir Benjamin Brodie. The profession will be glad to know that the learned president of the Royal Society is recovering from the operation for cataract, which was performed upon the right eye, and which promises to be successful.

Sponge Fishery. There are six hundred boats, and four thousand two hundred men, now employed in the sponge fishery of the Ottoman Archipelago. Sponges are found at an average depth of thirty fathoms, and a good diver will make from eight to ten dives in a day.

Medicine in Prussia. The medical staff of Prussia, according to the last survey, in a population of 17,739,913 inhabitants, amounts to 358 district physicians (these are paid by government shares to attend the poor gratis); 4,327 physicians who have the doctor's degree; 996 surgeons of the first class; 643 of the second class; 6,026 doctors for animals, first and second class; 1,529 the first, and 11,411 midwives.

Army Medical Service. On the 1st inst. the first competitive examination of the students in the Army Medical School, recently founded at Chatham, for commissions as army-surgeons, commenced at Fort Pitt, when forty-five candidates presented themselves for examination. The examiners are Professors T. Longmore, M.D., Deputy Inspector-General; Professor E. A. Parkes, M.D.; and Professor W. Aitken, M.D.

Dr. Livingstone's Expedition. The steamer *Pioneer*, for the Livingstone expedition, commanded by Captain May, who was formerly connected with the Niger expedition, arrived in Simon's Bay on December 7th. Her voyage has been a long one, as she put into several ports on the West Coast. She was to leave in a day or two for the Zambesi, under convoy of her Majesty's steam ship Sidon. (*Cape and Natal News.*)

Iodine in Rain-Water. M. Chatin informs the Academy of Sciences of Paris that he has found iodine in the rain-water of Paris, and also in that of Pisa, Florence, and Lucca; and that although he had not succeeded in obtaining that element in its natural state from these waters, he had extracted it from two aquatic plants, viz., the *nasturtium officinale* and the *ceratophyllum demersum*, a fact which showed that the water in which they grew must have contained some.

Consumption of Meat. According to M. Block the yearly consumption of meat by each individual in the various European countries is as follows: France, 44.11 lbs; Great Britain, 59.5 lbs; Bavaria, 45 lbs; Spain, 28.45 lbs; Holland, 40.2 lbs; Sweden, 44.56 lbs; Denmark, 49.93 lbs; Saxony, 41.9 lbs; Wurtemburg, 49.4 lbs; Austria, 44.11 lbs; Naples and Sicily, 23.6 lbs; Hanover, 41.9 lbs; Luxemburg, 43 lbs; Mecklenburg, 64 lbs; Tuscany, 18.75 lbs. (*Gazette des Hôpitaux.*)

Cinchona. The increasing demand for cinchona barks, and the increasing difficulty in supplying that demand, have induced the Dutch government to undertake the transportation of a supply of plants and seeds of the cinchonas to the island of Java, where the soil and climate are believed to be favourable for their successful growth. We learn from the *London Pharm. Jour.* that this enterprise has been entirely successful, the young trees already yielding bark of a good quality. The East India Company has also undertaken the same enterprise, and through the efforts of their agent, Mr. Markham, upwards of two hundred plants are now on their way to India. (*American Medical Times.*)

Court-Martial on a Naval Surgeon. A court-martial was held last week, on board Her Majesty's receiving-ship Hibernia, to try Dr. Lowry Monteith, surgeon of Her Majesty's frigate *Melpomene*, Capt. Ewart, on a charge of neglecting to pay proper attention to his patients and not treating them with kindness, terminated its proceedings on the 29th inst.—the fifth of its sitting. The charge was divided into eight separate counts, specifying certain cases in which some of the crew had been sent back to their duty before, as was alleged, they were sufficiently recovered from sickness, and in two instances in which Dr. Monteith had unjustly accused them of skulking. Dr. Monteith, in his defence, totally denied the charge, replying to each of the counts contained in the indictment, and endeavoured to prove, on the contrary, that he was in the habit of treating the men with consideration and kindness. The Court, however, found him guilty of a sufficient portion of the charge to induce it to sentence him to be reprimanded and to be dismissed the ship.

Fatal Effects of Large Doses of Chlorate of Potash in Phthisis. An inquest held January 16th, upon the body of Mr. John S. Tuttle, of Bergen, New Jersey, reveals the fact that deceased was suffering from phthisis; that he applied to a physician of this city, who ordered eight ounces of chlorate of potash to be put up in twelve packages, one of which (containing over 300 grains) was to be taken daily in a pint of water. He took four powders on consecutive days when the pains in his bowels became very severe, incessant vomiting came on, and finally death ensued. Dr. Booth, assisted by Dr. Olcott, of Jersey City, made a *post mortem* examination, and found the external coat of the stomach in a state of inflammation; the internal coat was yellow, the same as that he had vomited; it was soft and could be easily separated off with the handle of the scalpel leaving the muscular coat entirely bare; the lungs were diseased, but the patient might have lived six months or longer. Dr. Olcott and Dr. Booth were of the opinion that the medicine (chlorate of potash) was the immediate cause of death. Dr. Booth testified that from ten to thirty grains of chlorate of potash was a dose, and he had known bad effects from twenty grains given once in three hours. (*American Medical Times.*)

State of the Public Health. 102,557 deaths were registered in the last quarter of the year 1860, and the annual rate of mortality during the season was 2.024. The mortality was 0.158 below the average. Upon making up the account for the year the deaths are found to be 422,500; and the annual rate of mortality 2.113; or a little more than 21 in 1,000. The average of the preceding ten years is 22. So one life in every 1,000 living was saved. Yet the mortality of England and Wales is still greatly in excess of the rate experienced in the least unhealthy districts. The deaths instead of 102,557, would at that rate have been 79,283; so during the 92 days 23,274 persons died unnatural deaths in the least unhealthy country in Europe. The densest districts are still the unhealthiest. In the population of town districts exceeding 8,000,000 at the last census the mortality was at the rate of 23 in 1,000; in the country districts, of more than 9,000,000, the rate of mortality was 18 in 1,000; so the chance of dying in the two groups of districts were as 23 to 18. There is a wide field open for sanitary improvement in the country as well as in towns, and it is gratifying to find that the progress is now evident; for the mortality of the town districts has declined from 25 to 23, and of the country districts from 19 to 18. Upon looking at the country generally, we find that the epidemic diphtheria still prevails in parts of the kingdom; measles, whooping-cough, small-pox, scarlatina, fever, are also so frequently mentioned in the registrars' notes that they may be considered prevailing epidemics. It is the characteristic of these zymotic diseases that they do not depend upon general atmospheric conditions, but are often very fatal in one community, while they are entirely absent from another in the same climate.

The Death of Dr. Baly. At the coroner's inquest on the late Dr. Baley, which was opened on Thursday week, the following evidence was given by Dr. George Wyld, who was a passenger in the same carriage with the lamented gentleman:—"On the afternoon of Monday, January 28th, I was a passenger by the 5.10 train to Guildford. I went into the middle compartment of a first-class carriage, to Guildford. I took my seat at the right hand corner, with my back to the engine. The carriage was about the middle of the train, rather forward than otherwise. I did not notice the guard-van then, but I can state that after the accident I saw no guard-van behind the carriage I had been in. Two gentlemen got into the carriage. One took the seat at my right hand in the corner, the other taking the diagonal corner opposite the second gentleman who got into the corner. I observed that the third gentleman on taking his seat was of dark countenance and pale. Immediately on taking his seat he covered his face with a white cambric handkerchief and went to sleep. I took no further notice until I found a sudden bumping. Having been in the accident at Hitchin, in September, 1859, I knew it was no use to do anything, so I sat fast. I observed the third gentleman get up; he looked surprised and only half awake. The carriage began to heel over, and I laid hold of the carriage on my left hand. I looked to the left, and saw a great hole or chasm. It was almost momentary. Immediately afterwards I saw the third gentleman fall backwards, his knees being drawn up towards his head, and his hands, instead of being extended, held up, as if to protect his face. I observed his face calm, not expressing fear. Immediately on falling he suddenly disappeared into the chasm. The carriage was then falling; it fell on that side. I imagine that the third gentleman was not fully awake. He did not make any remark. I think he lost his equilibrium, and fell through the aperture, but whether that was the door open on the side out I cannot tell. I cannot tell how far the carriage went, but my impression is that the deceased must literally have been ground into the dirt and gravel by the weight of the carriage, which must have caught him up in falling. I did not notice the action of the other person. I did not see any attempt made to open the door by any one in the carriage. I do not know whether the window was down, but it might have been. If the window was down the aperture was not large enough, and the door must have been forced open.

He fell past me. I can say that the second gentleman made no attempt to open the door, and I do not think the deceased did so."

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.
Friday....... Westminster Ophthalmic, 1·30 p.m.
Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 8·30 p.m.: Dr. B. W. Richardson, Lettsomian Lecture.—Royal Geographical.

Tuesday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Royal Medical and Chirurgical.—Zoological.

Wednesday. Royal College of Physicians, 4 p.m.: Dr. Brown-Séquard, Gulstonian Lecture.—Society of Arts.—Microscopical (Anniversary).

Thursday. Royal College of Surgeons, 3 p.m.: Mr. W. Coulson, Hunterian Oration.—Royal.—Antiquarian.

Friday. Royal College of Physicians, 4 p.m.: Dr. Brown-Sequard, Gulstonian Lecture.—Geological (Anniversary).—Royal Institution.

Saturday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Asiatic.

TO CORRESPONDENTS.

⁂ *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

The Journal.—Sir: I desire to say a word or two regarding the recent changes in our Journal. 1. I quite agree with you, that it is right for our profession to have a weekly journal, independent of the interests of any particular proprietor. 2. I think the change in the size of the Journal a great improvement. 3. The spirit and talents you have displayed in the articles which have appeared during your reign, and the selection of lectures and papers for publication, indicate that you are acquainted with the requirements of our profession, and that you are labouring to supply these requirements. Persevere, I pray you. May I conclude with one word of advice? Endeavour to uphold the dignity of the medical profession by advocating all measures calculated to add to its dignity; but never reply (even should it be in a dignified manner) to abuse and misrepresentation. *Magna est veritas.*
F.R.S. and F.R.C.S., and an Old Mem. Brit. Med. Assoc.

[We have ventured the insertion of the above flattering note solely because it is from the pen of a distinguished member of our profession, whose name would, we know, if appended to his words, carry great weight with the profession at large.—Editor.]

The New License of the College of Physicians.—A correspondent asks:—"How is it that no Examiner on 'Forensic Medicine' appears in the list you gave the other day of examiners for the new license of the College of Physicians? Is this subject to be omitted altogether, or is it comprised under 'Materia Medica, Chemistry, and Pharmacy'?"

[The examination in Forensic Medicine is included under the head of Practice of Medicine Examination.—Editor.]

Mr. Armstrong Todd.—We are sorry that we cannot insert Mr. Armstrong Todd's letter. It contains matters almost wholly of a personal character, and therefore in no way affects the general subject of Special Hospitals. We are sure that Mr. Todd will himself see this upon reflection. We are always open to a fair statement made on either side of a disputed point; but we must, as far as possible, eschew all reference to personal shortcomings, whether hypothetical or real.

Mr. Roper.—Messrs. Weiss of the Strand have, we understand, undertaken the sale of the shade for the eyes—the Occhiombra, to use the ambitious nomenclature of the inventor.

Artificial Respiration.—A correspondent asks us to inform him of the method of performing artificial respiration recommended by Dr. Silvester. Dr. Silvester's original paper on this subject appeared in the British Medical Journal of July 17th, 1858. As the subject is one of much interest, we elsewhere give Dr. Silvester's rules for the treatment of apnœa, as laid down in that paper.

COMMUNICATIONS have been received from:—Dr. L. Beale; Dr. P. H. Williams; Mr. Price; Mr. T. M. Stone; Dr. W. O. Priestley; Dr. Hassall; Dr. Skinner; Mr. A. B. Steele; Dr. R. Hill; Mr. Roper; Mr. Coulson; Mr. Toynbee; Mr. Fleischman; Dr. Wollaston; Mr. James Paget, Mr. S. Wood; Dr. Newman; Mr. H. H. Sheppard; Dr. A. Hill; Mr. J. K. Spender; Mr. R. S. Fowler; Ignoramus; Dr. Felce; Dr. W. H. Cooke; Mr. Acton; Mr. MacManus; Dr. Thorburn; Dr. Inman; Dr. J. Toogood; Mr. Armstrong Todd; and Mr. J. Gardner.

BOOKS RECEIVED.

1. On Food. Being a Course of Lectures delivered at the South Kensington Museum. By *E. Lankester, M.D., F.R.S. First Course. London: R. Hardwicke. 1861.
2. Case of Traumatic Spreading Gangrene. By P. Handyside, M.D., F.R.S.E.
3. Adulterations Detected; or, Plain Instructions for the Discovery of Frauds in Food and Medicine. By Arthur H. Hassall, M.D. Second edition. Pp. 712. London: Longmans. 1861.
4. The Gastric Region and Victualling Department. By An Old Militia Surgeon. London: 1861.
5. Constipated Bowels, the Various Causes and the Rational Means of Cure. By *S. B. Birch, M.D. London: Churchill. 1861.

ADVERTISEMENTS.

Fourth Edition, just published, price 2s. 6d., by post for 32 stamps,

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Two Lectures

INTRODUCTORY TO THE CLINICAL COURSE ON

THE DISEASES OF WOMEN AND CHILDREN.

DELIVERED AT THE MIDDLESEX HOSPITAL.

BY

WILLIAM O. PRIESTLEY, M.D.,

PHYSICIAN-ACCOUCHEUR TO THE HOSPITAL, AND LECTURER ON MIDWIFERY IN THE COLLEGE.

Lecture II.

I pass now to some general considerations concerning the diseases of women. In the human female, the entire system may be said to be more subservient to the function of reproduction than it is in the male. By this, I do not mean that the sexual passion is stronger in women than in men. The idea I would convey to you is, that the more important part which the woman bears in the reproduction and rearing of offspring requires more extensive adaptation of means to carry out the purposes required, and her system is therefore laid under heavier contribution to this end. Beyond the act of impregnation, the man has little to do with the production and fostering of his offspring; but to the woman belong all those complex functions connected with gestation, parturition, and the subsequent duties of lactation and nursing. The interests and duties of maternity are in the mother paramount to all others, and her corporeal structure and mental characteristics are in strict conformity with what in these respects is required of her.

In women, during the reproductive period of life, the body is less firmly built than in men, and not so capable of physical exertion; all the tissues are softer and more pliant; the shoulders are narrower; but the pelvis is broader, its cavity wider, and its walls smoother, to facilitate parturition. The chest and lungs are smaller in their entire dimensions; and a woman breathes from the first more by the upper part of the chest, and thus incurs less discomfort when the increase in size of the gravid uterus pushes up the diaphragm, and impinges on the inferior boundary of the thorax. There is a greater activity of the circulation; the pulse is quicker; the arteries bear a larger proportionate size to the veins in the female than in the male; and the capillary system is more developed. We see evidence of this in the brighter colour of the skin, its greater clearness and transparency, and the readiness with which the colour is heightened by exercise or blushing.

Closely in relation to the activity of the vessels stands a most susceptible nervous system. Women are far more affected by all nervous stimuli than men are. There is a greater development of the affections and emotions, and a most acute sensibility to all impressions.

It has been noticed, moreover, that women possess a greater vital tenacity. They more readily recover from injuries, and rally more speedily from acute diseases or loss of blood.

As a rule, it may be stated that women approach in organisation nearer to children than to men; and we see an obvious reason why this should be so. The relation which the woman bears to nutrition and growth very closely approximates to that of the child. The child, besides providing for its waste of tissues, has also to provide the materials for further growth; and the woman, in like manner, besides carrying on the nutrition of corporeal parts already existing, requires such an economy as can provide for a process of development within her body even more rapid and wonderful than that which takes place in the growth of young children.

The development and growth of the fœtus in utero has excited the admiration and wonder of physiologists in all time, and is certainly among the greatest marvels of nature.

In the short space of nine months—the period of utero-gestation in the human species—it has been calculated that the uterus, which measures in length, in the unimpregnated condition, not more than three inches, attains the measurement of from eleven to thirteen inches at the full period of pregnancy. Its superficial measurement before pregnancy being not more than perhaps sixteen square inches, at term is as much as 339 square inches. The uterine cavity in the virgin state not having a capacity for more than two fluid-drachms, enlarges so that it will contain ten to fifteen fluid-pounds. The weight of the uterus itself being, in the virgin, not much more than one ounce, increases during pregnancy to twenty or even forty ounces; and the contents of the womb, from being nothing more than a little mucus before impregnation, average when gestation is completed from 100 to 150 ounces.

But this is not all; the full period of pregnancy having arrived, in the course of a few hours the contents of the uterus are expelled by a remarkable combination of muscular powers. The uterus itself collapses and contracts in all its dimensions, and a large quantity of that blood which has been employed in affording nourishment to the organ and its contents, is thrown back upon the maternal circulation. The gravid womb, being composed of innumerable bundles of unstriped muscular fibres, now finds its function at an end; and a retrograde metamorphosis commences, by which the whole muscular substance is rapidly converted into fat, and then absorbed into the circulation. The uterus in this way undergoes a diminution to a size nearly equal to that which it possessed before the occurrence of pregnancy.

Here again we see occasion in the female system for great activity in the functions of secretion and excretion; the glandular organs are largely developed, and it well deserves remark that the period of lactation commences almost simultaneously with the influx of blood and the products of absorption to the maternal circulation. An outlet is thus established through the breasts for the elimination of those materials which might act injuriously on the system, but are thus made to answer an useful purpose in the nourishment of the offspring.

Now, on account of these peculiarities in the frame of women, we find certain characters impressed on all the diseases by which they are affected. Very much as in young children, acute diseases run a more rapid course than in men, and there is a greater tendency to those diseases which are characterised by vascular excitement. Inflammatory affections, however, generally bear a more asthenic type, and vascular excitement is likely to be of more fleeting character. But, perhaps, the most remarkable feature in diseases of women is that, whether acute or chronic, they are almost invariably complicated with some derangement of the function of innervation. Wherever the process of nutrition is carried on with great activity, there is exaltation of the function of innervation; and in woman the sympathetic nervous derangements educed by a slight deviation from health in some single organs are so numerous and complex that they may entirely mask the real ailment, or, as in the various phases of hysteria, be the only discernible symptoms.

To some of the morbid affections which are common to the two sexes, we find a much greater proclivity in women than in men. Nearly three times as many women as men die annually of cancer. The explanation of this is probably to be found in the greater preponderance of the glandular element in women, which has previously been alluded to. Cancer is a disease which especially affects glandular structures; and in females we have glandular organs highly developed, and performing most important functions in the economy, which exist only in a rudimentary form in men. The breasts and uterus are by far the most frequent seats of cancer in women; and both are glandular organs, endowed with great functional activity during the whole reproductive period of life.

To some diseases women are less liable than men. From Mr. Hodgson's work on *Diseases of the Arteries and Veins*, we learn that aneurism occurs eight times oftener in men than women; and, taking the whole range of pathology, females are understood to be liable to diseases of a less fatal character than males.

The customary habits of life of women in the various grades of society predispose them to certain irregularities of health common to the sex. As a rule, women lead more sedentary lives than men; they have less out-door exercise, and are thus less exposed to the beneficial influences of air and light. Their mode of dress follows rather the caprices of fashion than what conduces to utility and comfort; and the tight-lacing so commonly practised, but never admitted, and the heavy weight of garments suspended from the waist, have directly injurious effects on the general health. All these peculiarities predispose to congestion of the pelvic organs, hæmorrhoids, and varicose veins of the lower limbs, which are common affections in women at all ages.

It can scarcely excite surprise that injuries and disease often follow the processes of gestation and parturition, and that lesions resulting from these should frequently be found to exist in the organs chiefly concerned long after these processes are completed. The mechanism by which the contents of the gravid uterus are expelled at the time of labour is arranged with wonderful precision, and each successive step shows a remarkable adaptation of means to the end required. But the very accuracy and precision of the various steps in the process become elements of danger if derangement occur; and then the great power which the uterus employs in the expulsion of the fœtus, the forcible dilatation to which the genital passages are subject, and the pressure exerted on the maternal structures as labour advances, may become the means of inflicting serious injury on the organs concerned.

The immediate results of parturition belong necessarily to the general course of midwifery lectures, and are included under the head of puerperal diseases; but we shall find, as we pursue our investigations into the various forms of disease of the reproductive organs incident to the unimpregnated female, that the origin of a very large proportion can be distinctly traced back to some previous labour or abortion, the results of which may have lasted months or even years after the receipt of the original injury.

Thus produced, we are often able to trace the various forms of chronic inflammation of the uterus; the results of inflammation of the pelvic cellular tissue and uterine appendages; and that singular form of enlargement of the uterus connected with its defective involution after delivery, which has been called subinvolution of the uterus.

But, in women who have not borne children, or who are not pregnant, the reproductive organs are not idle. The performance of certain functions is required of them during the whole reproductive period of life. It is now pretty clearly established that at the time of each catamenial period one or more of the vesicles of De Graaf arrive at maturity in the ovary, and burst through the coats of that organ to throw their contents into the extremity of the Fallopian tube. This process, which has been termed *spontaneous ovulation*, takes place in all healthy women. The process becoming perverted produces various diseases, some of them of very grave character. Those immense cysts found in diseased ovaria, and sometimes occurring singly, but more frequently in numbers agglomerated together so as to form one large mass, are believed to be formed out of those small Graafian vesicles which in the healthy ovary are undergoing slow development, but under normal conditions do not attain a size much larger than a pin's head.

Accompanying the periodical maturation of these vesicles, is an intense congestion of the uterus and its appendages. The vessels of the uterus, ovaries, Fallopian tubes, and, indeed, of all the pelvic organs, become turgid with blood, and the abdomen itself becomes fuller. The result of this congestion is the production of the catamenial discharge, which is at length secreted from the mucous membrane lining the Fallopian tubes and uterus, and which escapes from the vagina during the continuance of the menstrual period. The reason for the occurrence of the menstrual flux in women is not well understood; but it is somewhat curious that upon the proper performance of a function, which appears as a penalty exacted only from the female sex, are made to depend, not only the maintenance of their general health, but also that grace and beauty which are the especial attributes of women. If, in the unimpregnated female, the catamenia become too sparing or are suppressed, a long train of morbid symptoms are likely to exhibit themselves; and the consequent derangements not only affect the corporeal well-being, but may act also deleteriously on the mind. Commonly, with functional suppression of menstruation, appear an unusual pallor and sallowness of countenance, an anæmic condition of the mucous membranes, and various other indications of impaired health. With too profuse a catamenial flow we have all the effects of loss of blood; and, if the performance of the menstrual function be attended with pain, as in cases of dysmenorrhœa, it acts injuriously in many ways. Probably, sterility is the consequence; and, besides this, the patient may be obliged to keep her bed for two or three days in each month; the endurance of pain depresses the vital powers, and she looks forward to each approaching period with anxiety and distress. The persistence of dysmenorrhœa seems also to predispose to uterine disease of a more severe and fatal character. In Dr. Lever's volume on *Diseases of the Uterus*, it appears from collected statistics that upwards of fifty-four per cent. of women affected by carcinoma uteri had suffered previously from dysmenorrhœa.

When organic disease of any description has already invaded the uterus or its appendages, the symptoms usually undergo aggravation during the occurrence of the menstrual periods.

At the commencement of menstruation, when the girl merges into the woman, and at its decline, when the power of reproduction is about to cease, there seems a more than usual proclivity to the development of morbid affections; just as in children at the periods of dentition, these are critical periods of life, and if the seeds of disease be present in any form of predisposition, morbid action readily establishes itself.

[*To be continued.*]

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

CASES OF AN UNCOMMON FORM OF INFLAMMATION.

Under the care of C. HANDFIELD JONES, M.B., F.R.S.

CASE I. E. G., aged 30, was admitted as an out-patient on July 7th. She had been ill fourteen days. She had pain in the left leg from the top of the calf downwards, compared to that which might be produced by a dog gnawing the bone. She had no rest at night. Skin cool; pulse feeble; tongue whitely coated. Very little could be discovered amiss in the leg. She had rheumatic fever five years ago, and rheumatism in the shoulder one month ago.

℞ Potassii iodidi gr. ij; tincturæ cinchonæ ʒj; decocti cinchonæ ℥j. M. Fiat haustus ter die sumendus.

℞ Linim. saponis ℥ij; tinct. aconiti ℥j. M. Fiat linimentum cruri applicandum.

July 11th. The left leg is much swollen, very tender and painful; the veins are full. The calf is cool, not tense; it seems as if the distending cause were deep seated below the muscles. Much sweating.

℞ Potassii iodidi gr. vj; infusi chirettæ ℥j. M. Fiat haustus ter die sumendus.

July 14th. The leg is rather more swollen, much so about the ankle and foot. Surface cool; pain great; bowels confined. Ten leeches were applied to the leg, and white mixture was ordered to be taken twice a day.

July 23rd. She has been an in-patient now some days, taking effervescent saline mixture and compound soap pill every night. The leg is in much the same state, swollen to some extent, and painful; it is enveloped in a poultice. She was ordered to have hydrargyrum cum cretâ and Dover's powder every night.

July 30th. The mouth is moderately sore. She has not quite so much pain in the leg; all the posterior part of the calf is soft and painless; but there is pain and swelling in the course of the fibula at the upper third, and pain about the ankle, with notable puffy swelling. The foot cannot be flexed. The poultice is very comfortable.

Aug. 10th. She was ordered to have gr. iij of iodide of potassium in compound infusion of gentian three times a day.

Aug. 17th. The swelling of the leg has subsided; there is great tenderness about the upper part of the fibula; ankle stiffish, and the adjacent foot rather swollen.

Sept. 9th. She is doing well, but cannot bear her weight on the leg. The ankle is still puffy.

Sept. 19th. She was made an out-patient again, in about the same state as at the last report.

℞ Potassii iodidi gr. iij; tinct. cinchon. ʒj; infusi cascarillæ ℥i. M. Fiat haustus ter die sumendus.

Oct. 17th. She has been fourteen days in the country. The leg is much better, but she cannot bend her foot as she used. She has most pain in walking. There is some pain and œdema just behind the outer malleolus. She suffers with faint sensations and hot flushes seven or eight times a day. The medicine was repeated, and a blister was placed behind the ankle. After this she ceased to attend.

REMARKS. The prominent features of this case were protracted, subacute, non-suppurative inflammation, attended with severe pain, and little influenced by remedies. Two surgeons of great experience, who saw the case at the time when the symptoms were at their height, had no doubt that abscess was forming. It seemed probable that periostitis existed; but, if so, it is rather remarkable that iodide of potassium was so unavailing.

CASE II. S. J., aged 28, female, was admitted August 22nd, having been ill eighteen days. The right forearm is considerably swollen, and pits slightly; the hand and fingers are swollen, but not hot. At the inside of the elbow, there is an inflamed, red, ill defined, specially tender swelling; above this, the limb is natural. There are no distended veins on the forearm. She has considerable pain all over the forearm, except when it gets numb occasionally in all the fingers, which relieves it awhile. The pain causes vomiting. Skin cool; pulse weak; tongue coated; bowels open; urine very dark and red. She feels thirsty and faint. She has no idea what brought her illness on. At first, she was seized with violent pain all down the right side from the shoulder to the foot; the arm was painful, and ached, but did not swell for three days. Ten leeches were applied to the right elbow, and saline mixture with nitrate of potass and chloric ether was given every three hours.

Aug. 27th. The leeches were repeated on the 25th; but the pain continues very severe. She was ordered to have gr. v of iodide of potassium three times a day; and a poppy fomentation.

Sept. 1st. She was better last night, after taking ten grains of Dover's powder. The arm is still much swollen; the chief swelling and pain is about the elbow, at the two condyles. She obtains much relief from steeping the arm repeatedly in hot water. Pulse exceedingly feeble.

Sept. 5th. She was ordered four grains of hydrargyrum cum cretâ and half a grain of opium twice a day.

Sept. 8th. The pain unrelieved; it shoots up to shoulder. Arm much swollen; urine pale. The pills were ordered to be repeated every night, and an ounce of quina mixture to be taken three times a day.

Sept. 9th. She was made an out-patient.

Sept. 14th. The arm has been kept enveloped in a bandage wet with strong lead lotion. She is certainly better; the hand and lower part of the arm are no longer swollen, but shrunken and wrinkled; the elbow is still swollen. She had till last night very much pain in the arm, extending also to the side; to-day, it is much better. She slept better last night, before which her nights were very sleepless. The appetite is better. She has had no mercurial since the 9th. She was ordered to have four ounces of wine, and ordinary diet.

Sept. 16th. The swelling of the arm has subsided, except a mass of deep-seated induration at the internal and fore part of the elbow. She has much pain in attempting to extend the elbow; passive extension gives pain. The urine is very clear and pale. Mercurial ointment was applied to the elbow, and hydrargyrum cum cretâ ordered every night.

Sept. 21st. She had a very bad night, from pain. Eight leeches were applied to the inner side of the elbow; and she was ordered to have gr. iij of blue pill and half a grain of opium three times a day.

Sept. 22nd. She has derived much benefit from the leeches. At the outer part of the elbow, there is fluctuation, or a condition which gives quite that sensation. The eight leeches were repeated.

Sept. 26th. The elbow is notably better; mouth not fully sore. She was ordered to take the pill twice a day, and to have gr. x of chlorate of potash twice a day.

Sept. 30th. The pills have been omitted; and there is more pain.

Oct. 14th. She has had two blisters applied to the elbow, and has regained some use of the fingers. The elbow, however, is all but fixed in semiflexion; the joint is swollen, and its temperature is increased. The health is good.

Nov. 15th. The elbow has been put up in Scott's bandage the last fortnight: she is improving, and has more power of moving the elbow. She left the hospital soon afterwards.

Remarks. Here again we have protracted acute or subacute inflammation, attended with very severe pain, and little influenced by remedies. The leeches were certainly beneficial, but scarcely anything else that was tried. The non-occurrence of suppuration seems to me very difficult to account for.

Case iii. Mr. B., a middle-aged stout man, was seen in consultation, October 3rd, 1859. He had been ailing about three weeks; he always had good health before. He is much depressed. Appetite good. The urine has been thick; to-day it is clear, not albuminous, of good colour. He complains of severe pain in the right leg when he puts it to the ground; the pain shoots all the way up the calf. There is considerable swelling of the leg both in front and behind; it seems owing to inflammatory œdema of the subcutaneous tissue, not at all involving either the ham or the foot. The surface pits on pressure. Yesterday the left leg was affected; to-day it is free. He can move the foot on the leg freely without pain, while he is lying down. Tongue clean; bowels open; skin cool; pulse weakish; sounds and action of the heart normal.

℞ Potass. iodidi gr. i; ammoniæ carbon. gr. v; tinct. cinchonæ ʒi; infusi cascarillæ ℥i. M. Fiat haustus ter die sumendus.

He was also ordered to take gr. x of Dover's powder every night, and to have a liniment containing tincture of aconite and laudanum applied to the leg.

Nov. 5th. The leg and thigh are very greatly swollen and hot; and the thigh especially very red on the surface. The redness is not as marked or limited as that of erysipelas, but the pathological condition is evidently similar. The swelling is pretty elastic, more so in some parts than others; at the back of the calf, it does not pit on pressure; at the front of the leg, it does. He can move the leg very little, and complains chiefly of the great distension. The right leg is swollen from the toes to the groin; the left is unaffected. Tongue quite natural; appetite good; pulse quite soft and weak, 110; urine of full colour, clear, rather scanty; yesterday it was thick. He was ordered to have eight grains of disulphate of quina three times a day.

Nov. 7th. The leg is not less swollen; the foot is even more so; and he is in much pain. Urine more scanty, and red; tongue clean; pulse 110. The inflammation seems diminished in the thigh; the whole limb has had strong lead lotion applied to it. An incision on the dorsum of the foot was recommended, and ʒss of nitrate of potash in ptisan daily. The quina was continued.

Nov. 10th. The incision was made, and has given much relief to the tension and pain; he can move his leg better. A great deal of fluid has escaped, soaking the bed around. The leg is still very much swollen quite up to the groin, pitting on pressure; and there is some dusky redness of the surface. He has much less pain, and has passed a good night; he complains of pain in the other (left) leg, extending along the course of the femoral vessels from the groin, and down along the back of the leg below the knee in front of the calf. There is some œdematous swelling about the left foot. The urine is about a pint in twenty-four hours, very red and lateritious. Appetite good; bowels open; pulse 117, thrilling. He was ordered gr. iiss of calomel and half a grain of opium three times a day; and gr. v of carbonate of ammonia in ℥i of tartrate of potash mixture three times a day.

Nov. 12th. The right leg has diminished in size, but there is indication of suppuration having taken place at the postero-inner part of the calf. There is much pain and tenderness of the left groin, and down some way along the inner part of the thigh; the whole limb from the foot upward is greatly swollen. Pulse 126; tongue clean; urine very red, less lateritious; skin quite cool. The absence of general pyrexia is remarkable.

Nov. 14th. He has required opium at night; the pain in the left groin has been relieved by a blister. The left limb is swollen as at the last report.

Nov. 19th. He is decidedly improved, and has been taking decoction and tincture of cinchona. The urine is much more free, and the swelling of the leg is slowly subsiding. Appetite good. He has had two grains of opium every night.

Nov. 23rd. He is in the same state; he sleeps well on alternate nights. Some erysipelatous redness and swelling extend up the right side of the abdomen. He was ordered to take ʒij of tincture of cinchona three times a day.

Nov. 29th. He is not better as regards the state of the legs, which are brawny and much swollen. Appetite good; tongue clean; pulse 112, pretty full, soft; urine inclined to be scanty, thick.

℞ Pilul. hydrargyri, pulv. scillæ, āā gr. iss. M. Fiat pilula ter die sumenda.

℞ Infusi digitalis ʒvj; aquæ menthæ piper. ʒij; tinct. lyttæ ♏x; potassæ acetatis gr. xv. M. Fiat haustus ter die sumendus.

Dec. 2nd. The quantity of urine is much increased, and the size of the legs is less. The pill was ordered to be continued every night, and the mixture three times a day.

Dec. 9th. He is improving. There being more tendency to diarrhœa, the pills were omitted.

Dec. 22nd. The urine is still high coloured, but the feet and legs are very much reduced. The skin tends to blister, and itches extremely. He looks very well.

℞ Ferri et quinæ citratis gr. vii; infusi digitalis ℥ss; spiritûs æther. nitr. ♏xxv; aquæ ℥ss. M. Fiat haustus ter die sumendus.

Feb. 9th, 1860. He is convalescent, walking about.

May 15th. He continues well. His feet and legs swell much in the course of the day, but the swelling subsides in the night.

Remarks. The inflammation first decidedly attacked the right leg; it was clearly of erysipelatous character;

it spread distinctly upwards; and at a later period, when extending up the side of the abdomen, it had quite the aspect of erysipelas, the margin of the redness being a little raised. In the left leg, the pain and tenderness felt from the first in the course of the femoral vessels pointed to the probable existence of phlebitis. This may have no doubt given rise to the great distension of the subcutaneous tissue; but (even if it existed) I feel it difficult to believe that it was the sole cause. The inflammation in both limbs had very much the character of erysipelas; and at one time I did not doubt that we had to deal with a case of diffuse cellulitis, which would certainly eventuate in suppuration. How it was that this did not occur with such severe inflammatory action, I do not well understand. Careful examination failed entirely to detect any enlarged and indurated veins either in the groin or elsewhere. The erysipelas-like aspect of the disease led us to persevere with tonics, but they were of very doubtful utility. Certainly they in no respect ameliorated the disease; while, on the other hand, diuretics were of evident advantage. It was quite clear that there was an alternation between the state of the urine and that of the disease. Whenever the urine became free, the disease retrograded; whenever it became scanty and loaded, the inflammation increased. This is more like what one might have in a species of inflammatory œdema than phlebitis. The absence of general fever was remarkable; the pulse was much quickened, but there was no abnormal heat of surface. No typhoid symptoms were present throughout. There was no evidence of any special affection of the lymphatic vessels or glands. Shortly, the case appears to me as a peculiar form of diffuse inflammation of the skin and subcutaneous tissue, marked by its non-tendency to suppuration, by its protracted course, occurring in one limb after the other, and by its being in a notable degree controlled by diuretics, while tonics were rather injurious. This last point strongly differentiates it from ordinary erysipelas; with which it has, however, a striking similarity.

Case iv. M. A. C., aged 20, a female servant, was admitted as an out-patient on February 27th, having been ill since Christmas. She has had rheumatic fever. The left leg is swollen all the way up; the right not at all. The leg has been swollen since about January 6th. It is now tense and shiny; there is not much swelling of the thigh or foot. Pulse quick, excited, large; tongue whity; urine clear, generally pale; catamenia not regular; no vaginal discharge; heart's sounds normal. She is anæmic. Six leeches were ordered to be applied to the left leg. She was directed to have ℈i of acetate of potass in ℥i of compound infusion of gentian three times a day; and to have camphorated mercurial ointment applied to the leg.

March 5th. The leeches were repeated.

March 12th. The leg is much swollen, and is hot and tender; the thigh is also swollen. There are no enlarged veins visible. Urine free, clear; pulse weakly. She was ordered to have strong lead lotion applied to the leg, and to take gr. viii of citrate of iron and quina three times a day.

March 19th. Her appetite is lost. The swelling extends further up the thigh, producing brawny induration; the leg is still swollen, but less so. The urine is scanty, thick, and red; bowels costive; tongue a little coated.

℞ Pilul. hydrar. gr. iss; pulv. scillæ gr. i. M. Fiat pilula ter die sumenda.

℞ Infusi digitalis ℥ss; tinct. lyttæ ♍vii; potass. acetat. ℈i; aquæ menthæ piper. ℥ss. M. Fiat haustus ter die sumendus.

March 29th. There is no sign of salivation; the appetite is better. The leg is improving slowly; it is still notably swollen, but scarcely pits on pressure; the skin is not red. Urine free; pulse, of good force and steady.

April 12th. The leg is decidedly improved. The thigh is almost free from swelling. Appetite good; mouth not sore.

April 23rd. Two grains of iodide of potassium were added to the draught.

May 17th. The leg is much softer and less swollen, and cool; still it is larger than the other. Mouth not sore; pulse steady, quiet. The pills were omitted; the mixture was continued.

May 24th. She is improving slowly. After this, she ceased attendance.

Remarks. Here again we have an instance of a limb falling into a state of chronic non-limited non-suppurative inflammation, aggravated by tonics, and relieved by diuretics with mercurials. The inaptitude of the system to show the special effect of mercury is remarkable. Four grains and a half of blue pill were taken daily for about two months, without ptyalism being produced. There was no trace of phlebitis, nor of lymphatic inflammation; nor any apparent cause for the disease, except the account of a previous rheumatic fever.

The foregoing cases seem worth recording, if only as instances of a peculiar kind of inflammation. The process seems to have been partly of adhesive, partly of erysipelatoid character. It was perhaps a minor degree of the affection which in tropical countries produces elephantiasis.

Original Communications.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

V.—Operations on the Eye.

[*Continued from page 64.*]

The next series of eye-operations which I have to bring forward, include the cases in which the patients did not recover their sight after the operation of extraction of cataract. They are fortunately not so numerous, but are probably more instructive, although less satisfactory than the series just completed. I shall first enumerate eight in which the operation itself succeeded in removing the cataract satisfactorily, but where an amaurotic condition of the eye prevented the patient from seeing.

Case cclxxv. F., aged 50, with little or no sight; both lenses yellow, and the iris adherent to the capsule in each eye. It was a very unpromising case, but as she was sent up a considerable distance from the country, and was very anxious for a trial to be made, I operated on the left eye, making a lower corneal section, removing a portion of the iris and extracting an opaque lens through the aperture. She recovered with a clear pupil, but no improvement in the sight.

Case cclxxvi. M., aged 48. His left eye was destroyed twenty years ago by an accident. The right had failed for three years, and was oscillating, with a closed pupil. I extracted the lens through an upper corneal section after breaking up the capsule and interior adhesions, but to no purpose. His eye recovered and he went home with a clear pupil, but no sight.

Case cclxxvii. M., aged 54. Cataracts with slight external strabismus. I extracted the left lens by a lower section, and by the sixth day the wound had healed, and he had a clear black pupil, but there was no improvement in his sight.

Case cclxxviii. M., aged 60. His right eye had been staphylomatous for five years; and the left had been almost useless for six months, from an amaurotic condition with cataract. I extracted the cataract from the left eye, and when he recovered he had a clear pupil, but the amount of sight in this eye was useless.

Case cclxxix. F., aged 50, came from more than a hundred miles distance for relief. She had cataract with a pupil blocked up by lymph and adherent to the capsule, in the left eye, and the right had been amaurotic for three years. She saw barely the light. I operated on the left eye, unpromising as it was, and extracted a small hard opaque lens, the escape of which was followed by the discharge of some very fluid vitreous humour. The eye recovered after a short time, but the sight did not improve.

Case cclxxx. M., aged 61, with deep seated yellowish opacity, scarcely sufficient to account for his dimness of vision. I extracted a very yellow and slightly opaque lens from his right eye by an upper section. The operation was followed by a considerable amount of inflammation which was eventually subdued, but he never recovered his sight.

Case cclxxxi. M., aged 56. I extracted a dark and hard lens from his left eye with some little difficulty, owing to the extreme fluidity of the vitreous humour. His eye recovered fairly, but his sight was gone.

Case cclxxxii. F., aged 54, apparently a good case for operation, both eyes having been affected three years. I removed both cataracts; in the case of the right eye, the lens escaped with a good deal of vitreous humour; but in the left, the capsule was left behind, opaque and blocking up the pupil. I removed it with a hook, and it came out entire. After the operation she saw light with the right eye, but not with the left. The same night she complained of much headache, and I bled her and she was at once relieved. Both corneæ healed, and her eyes looked well, but she had no sight, for they were amaurotic.

Of the following two cases, one has been published in the Journal for May 3rd, 1856, and in both of them the sight was destroyed by the rare accident of hæmorrhage after the operation.

Case cclxxxiii. M., aged 60, with cataract of the right eye and corneitis; cataract and adherent pupil in the left following an injury. I operated on the right and extracted the lens. His eye never quite recovered, but became staphylomatous. I then, after waiting six months, operated on the left and removed the opaque lens. Hæmorrhage came on in the night, and filled his eye, so that it looked like a melanotic tumour, and completely destroyed the sight.

Case cclxxxiv. M., aged 73. I extracted the cataract from the right eye; the left had been destroyed ten years before by an accident. He went on well until the fifth day, when his eye began to bleed in the morning, as he was coughing, and a clot formed within the globe and his only chance of sight was thus removed.

The third set of unsuccessful cases was from suppuration in the eye, and in almost all of them the patients were weakly persons in broken down health.

Case cclxxxv. M., aged 56, had lost the sight of the left eye from a blow which produced amaurosis and capsular opacity; and his right eye had failed for eighteen months before I saw him, and in this eye there were cataract and adherent pupil, and the globe was soft. The prospect was most unsatisfactory, but at his request I operated, and with some difficulty removed the lens and capsule, and he saw the light better afterwards. On the third day his eye was very weak and painful, and and the next day the lids were swollen with puriform discharge and the eye suppurated, as if it had been affected with purulent ophthalmia.

Case cclxxxvi. F., aged 58, a weakly woman, very nervous and restless. I extracted the left cataract without material difficulty, and the same evening she complained of great pain, and the next day vomiting commenced, and the eye began to discharge. The eyeball suppurated and sank. This patient has since that date (1853) been content with the application of belladonna to the other eye, but will not submit to further operation.

Case cclxxxvii. M., aged 73, a large and blustering man, very unwilling to submit to discipline and reasonable directions (although by profession a preacher to others). I operated on the right eye and extracted the cataract without difficulty, a little vitreous humour escaping with the lens. He saw fairly after the operation, but the next day pain and swelling of the lids had begun, and his eye shortly suppurated. He went home without sight.

I believe that in this case the flap of the cornea came down in the night, for the patient was very restless.

Case cclxxxviii. M., aged 64. I extracted the right lens most satisfactorily, and he saw very well and "blue" afterwards. On the third day his eye was painful and the lids swollen, and suppuration set in and destroyed his eye.

Case cclxxxix. F., aged 70, with sunken eyes, but otherwise a good case. I experienced very great difficulty in making the corneal section (in the right eye), and when it was completed the lens fell back into the eye and disappeared from view. Inflammation came on on the third day, and the globe suppurated.

Case ccxc. M., aged 71. I extracted the right lens by an upper section; it was dark amber in colour. His sight was fair afterwards. The next day pain came on, and the eye suppurated.

Case ccxci. F., aged 64. I extracted the left cataract by a lower section. She saw fairly afterwards. The next day pain began, and on the third day there was some puriform discharge, and the eye suppurated.

This patient was extremely restless, and had been out of health for some time before the operation.

Case ccxcii. M., aged 65. His right eye had been blind for forty years in consequence of a blow, and ten years before he became my patient he had what appeared to be an amaurotic condition. I operated first upon the right eye by an upper section; and, after rupturing the capsule, the lens was jerked out into his hand with some fluid vitreous humour. I then operated on the left eye, making the lower section: the lens appearing to be falling back into the posterior chamber, I hooked it out with the curette. Pain in the eyes came on the same day, and on the following day purulent discharge flowed from the left eye. This gradually increased, and both eyes suppurated, and he went home very ill.

Case ccxciii. F., aged 71, a feeble and rheumatic old woman. I operated on both eyes, and extracted the lenses easily. The next day there was a little purulent discharge, which gradually increased, and after a few days profuse suppuration in both eyes followed.

The following seven patients lost their sight from iritis and closed pupil.

Case ccxciv. M., aged 60. I operated on the left eye by a lower section, and extracted the cataract satisfactorily. On the third day he complained of pain in the head, which left him after a few hours. He went on without any active symptoms, but not satisfactorily; and, at the end, when the eye became strong, the pupil was closed. I made a cut into it some months afterwards with the iris-knife, and he saw more light, but he never recovered useful sight with this eye.

Case ccxcv. M., aged 64, a healthy looking man with fully formed cataracts. The only sign of other disease about the eye, which I noticed, was a slight tremulous motion of the iris immediately before I made the section, and when it was completed the lens appeared loose in his eye, and escaped with some very fluid vitreous humour. He went on well until the sixth day, when I found him down stairs without leave, his eye tolerably strong, and with fair sight. The next day inflammation came on, with pain in the eye and head, redness and chemosis, and obvious symptoms of iritis. He was treated actively; but, when the inflammation subsided, he had closed pupil and no sight.

Case ccxcvi. F., aged 65. I operated on the right eye and extracted the cataract, a little vitreous humour following at the same time. She went on badly, suffering much pain and inconvenience, and at last the case terminated by her having a closed pupil.

Case ccxcvii. F., aged 63. I had operated successfully on this patient's sister, who was a spare healthy person, while she herself was a very stout, large, and plethoric woman, with remarkably prominent eyes and cornea. I operated on the left, in which was a little external strabismus, and extracted the cataract with unusual difficulty, owing to the patient's unsteadiness. Some vitreous humour escaped. She complained much of pain, and on the third day the lids had become œdematous. She had an extremely tedious convalescence, being unwilling to move away from her lodgings; but she never regained her sight, and now, after an interval of five years, she is blind, having on the other side an excellent eye for extraction, but she is not willing to suffer the pain. The pupil of the left eye is closed.

Case ccxcviii. F., aged 67. I operated on the left eye and removed a large flat amber lens, leaving flocculent matter in the pupil. On the fourth day she complained of pain in the bone round her eye. The inflammation that came on appeared very slight, but when she recovered her pupil was closed, and she would not submit to any further operation.

Case ccxcix. F., aged 56. I operated on the right eye. She went on well for a while, and everything appeared promising. After a fortnight she had sudden pain in the eye, and upon examination the anterior chamber was found to be full of blood, although it had been seen to be clear a few days before. The blood being absorbed, the pupil was found to be closed. I made a section with the iris-knife, and for two days she had good sight, but then the anterior chamber filled again with blood, and she did not recover her sight satisfactorily after it had been absorbed.*

Case ccc. F., aged 78. I operated on the left eye; both being much sunk. She recovered the strength of her eye, but the pupil was closed and the sight gone.

Remarks. I hope that the readers of the Journal will not have found these cases very tedious; for they vary a good deal from one another in progress and treatment as well as in their results.

I usually operate with the patient sitting, with the head supported, and make the upper section in the right eye, and the lower in the left eye; although in many instances I have made the upper section in both, and I cannot say which is the best. The eye is covered very lightly afterwards, some little difference being made in this respect with reference to the temperature of the weather. I have not found that it makes much difference in the result in what season of the year the operation is performed. There seems to be no limit as to age; my cases of extraction are all between forty-four and eighty-six, but the greater number between sixty and seventy-five; and the old ones do as well as the others. I do not like to operate in recent cases, for the lens is then swollen, and some of the softer part is held back by the pupil, and requires to be removed lest inflammation be set up by it. As an instance of advanced age, I may mention a case which I saw during my apprenticeship. Being in lodgings on the coast of Glamorganshire one summer, Mr. Estlin directed me to find out what had been the result of a cataract-case on which he had operated many years before; and, after a search, I found an old Welsh farmer, upon whose eye Mr. Estlin had operated eleven years before. At the time of the operation he was *eighty-eight* years old; and when I saw him, he was sitting in his arm-chair and in his farmyard, in his *hundredth year*, and he had been able to see well ever since the operation.

I have never given chloroform for this operation; for the pain is very slight, and I should fear the effect of the sickness which chloroform sometimes produces, and in old people particularly chloroform is never absolutely safe; and there is to me one other objection to the patient's being insensible during this operation. I think it is a great gain to him to see immediately after the operation, for it gives him encouragement to be quiet in his bed for a day or two with greater hope as to the result of his case, and this is not so trivial a matter as it appears. I am, however, aware that the opinion of some surgeons more experienced than myself is in favour of chloroform.

We so often see a white looking cataract contain a hard amber nucleus, that I do not think any one can say whether a cataract is hard or soft; and I believe that all cases in adults are likely to do better by extraction than by the needle-operation.

I do not generally notice any difference in the healing of the incision when it passes through an arcus senilis. It is an usual rule not to operate on one eye while the patient can see fairly with the other, and to choose the eye that has been longest affected and most dim; and I believe that this rule is most to the patient's advantage and the surgeon's credit.*

As to the question whether both eyes should be operated on at the same time or only one, I am still of the opinion I expressed before; viz., that a patient has a better chance of recovering sight when both are operated on, than when *one only* is operated on, and that the best chance is when one is operated on, and the other at a suitable interval. In fact, the question is resolved into one of convenience, and the opportunity the patient may have of obtaining surgical aid; and I have hitherto acted on this opinion and have seen no reason to regret it.

Another point has been mooted, which is worthy of consideration; viz., whether the successful removal of one cataract has the effect of retarding the formation of the cataract in the other eye; and upon this point I have no experience to offer. The only case which touches on the question was No. 237; and a single case is of no service in settling a question of this kind.

It is always a favourable sign of a healthy retina if the patient sees blue, violet, or purple light on the completion of the operation; and the fact is obviously explained by the yellow or amber colour of most cataracts; the blue tint which is seen being the complementary colour to the yellow or reddish light seen through the diseased lens.

In the after-treatment, but little is required if the case go on well; and if inflammation threaten, now that bleeding is gone out of fashion, our most valuable remedy is taken away. The application of the blistering fluid to the temples has in some cases saved the eye; and it is often of service to paint the eyelids and brows with the liquor belladonnæ, for the pupil is kept open in this way and the pain is lulled. Opium and blue pill may also be given.

When the case is to end badly by suppuration, the disease sets in on the second or third day; but when the sight is destroyed by iritis, it is often on the sixth or eighth day that the inflammation begins.

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* I have recently seen this patient again, and she has very fair sight, and a black and clear central pupil.

* The wisdom of this advice, in a worldly point of view, is quite another question, and many distinguished ophthalmic surgeons differ practically from me in this point; at any rate, I have frequently recommended delay, when consulted by patients (not poor ones) who could see fairly with one eye, and the result has generally been that they have gone to London for a "further" opinion, and have been forthwith operated on.

The following cases frequently do badly: where one eye has been injured, or where the iris (or lens) is tremulous, or where there is any iritic adhesion, or sign of previous internal inflammation, or amaurosis, or roughness of the cornea, a tendency to conjunctival inflammation, or much disposition to gout or rheumatism; and a surgeon who is determined to shew first-rate statistics, by excluding all these cases, may select some that would give almost universal success. There is, however, another view of the question; for, unless we can say that the patient cannot possibly derive any advantage from the operation, it is hard to refuse him the chance. Here, for instance, we get many poor and blind persons who have travelled up from South Wales or the neighbouring English counties, and who beg for the trial of an operation; and if it prove unsuccessful, as a reference to the foregoing cases will show that it not unfrequently does, they go home more resigned and satisfied.

Were I to subtract from my list of unsuccessful cases all those which would be rejected as unfavourable by a strictly scientific surgeon who would lend no ear to the prayers of the bad cases, it would leave but a small number in which the operation of itself had failed.

[*To be continued.*]

REMARKS ON OBSTRUCTION OF THE BOWELS: WITH CASES.

By Edward Copeman, M.D., M.R.C.P., F.R.C.S., Physician to the Norfolk and Norwich Hospital.

[*Continued from page* 141.]

Case xxxiii. *Constipation: Impaction: Stercoraceous Vomiting: Inflation: Recovery.* December 27th, 1856. Mr. ——, aged about 55, was attacked suddenly with pain in the abdomen, having had no relief from the bowels for seven days. I found the abdomen distended and tympanitic, but not tender. Pulse 90. There was not much constitutional disturbance; but he had been sick several times, and complained of great abdominal fulness. He had been taking aloes and opium for the last two days; before that, his surgeon gave him some croton oil, which caused vomiting. Several enemata had also been administered, but returned without any admixture of fæcal matter. I ordered a grain of aqueous extract of aloes and a grain of opium every four hours, and an enema twice more in the day.

December 28th. The enemata returned as they went up, and there has been no relief from the bowels. Abdomen more distended; and bowels filled with fluid contents as well as air. He was ordered to omit the aloes, and continue taking a grain of opium every four hours.

December 29th. He has passed a little wind, or rather a little escaped, as he said he had no power to expel anything from the bowels. He suffered from griping pains in the night, but was not very feverish: vomited fæcal matter this morning and looks haggard, expressing himself as without hope of recovery. Pulse feeble; abdomen more distended; he was unable to take nourishment, and suffering continued abdominal pain. As a last resource, we introduced the nozzle of a pair of bellows into the rectum, and tried to distend the lower bowels with air in the hope of thus relieving stricture. After we had persevered some time, he wished to go to the stool, and when there, passed flatus several times with some force, together with a very small quantity of relaxed fæces; enough to encourage at least a ray of hope, however little of confidence. The grain of opium was continued every four hours.

December 30th. We found him better this morning, from the effects of a good night's rest; and the abdomen was certainly not quite so tense. But there had been no relief from the bowels since our visit yesterday; so we again inflated the lower portion of the canal with a stomach-pump, and distinctly heard the air pass along the colon. On withdrawing the tube, which had passed up several inches, we found it had come into contact with fæcal matter; we therefore injected some oil and water in the hope of being able to get it away. After this, he went to the stool and expelled the fluid and a good deal of air with force, together with more than double the quantity of fæces that passed the day before. Being thus encouraged, we again inflated the bowels by the rectum until he complained of so much uneasiness and distension along the colon that we were obliged to desist; and he was put into bed faint, exhausted, and oppressed. We recommended gentle friction to the abdomen, and a continuance of the opium pills; and left him with the uncomfortable impression that our last operation of inflating the bowels had added to, rather than lessened, the danger of his case. A few hours after we left, however, he became easier, and passed a great deal of wind and some liquid fæces. For several days afterwards he passed free liquid evacuations from the bowels, to the relief of all his painful symptoms; and, in fact, he gradually recovered.

He is still living; but his surgeon informs me that every now and then he gets "blocked up," on which occasions he gives him aloes to liquefy the contents of the bowels, followed by grain doses of opium every four hours until he gets relief. How long this state of things may continue it is impossible to say; nor do I know what is the particular cause of the obstructions from which he occasionally suffers; but probably there may be some permanent organic mischief which will one day produce complete obstipation and put an end to his existence.

Case xxxiv. *Obstruction of the Bowels from Impaction: Peritonitis: Inflation: Recovery.* May 22nd, 1858. Mr. C., aged 22, a healthy son of a healthy farmer, was seized on Monday the 17th inst. with sudden pain in the centre of the abdomen, followed in the course of the day with chilliness and fever; this ushered in a sharp attack of peritonitis, for which he was leeched, blistered, and fomented, and took calomel and opium to commencing salivation. In a few days the inflammatory symptoms subsided, the tongue became moist, and the pulse fell to 80; but he could get no relief from the bowels in spite of purgatives and repeated injections, and the abdomen became very tympanitic. I found him with an anxious countenance, distended abdomen, complete obstipation, loaded urine; and he had been sick several times, but the ejecta were not stercoraceous. Pulse soft and under 90; tongue moist, but loaded; abdomen more tender over the sigmoid flexure of the colon than elsewhere, but I could not by palpation detect the precise seat of the mischief. The respiration was rather hurried, owing to the distension of the abdomen, and he experienced great difficulty in turning or moving in bed. It appeared that he had been in the habit of neglecting his bowels, allowing sometimes a week to pass without a motion. On introducing the finger into the bowels, I found the rectum empty but capacious, and the distended coils of bowel above were so forced down into the pelvis that I could not distinguish the course of the rectum higher than its pouch. The rectum itself was hot and tender, and the finger came away smeared with mucus, but without any tinge of fæces. On trying an enema of soap and water, it came away as fast as injected, without any tinge or smell of fæces; attempts were then made to pass O'Beirne's tube, but without success; and lastly, we tried to inflate the bowels by means of a pair of bellows. Whilst this operation was proceeding, I heard, and the patient felt, some air passing up the bowel above the umbilicus. A good deal, however, passed away as fast as it was blown in, and we were doubtful of any good effect being produced. Just before I left the house, with a feeling in my mind that the case must terminate fatally, he mentioned to the nurse that he thought he wanted to pass something; and on using the bed-pan, he passed several ounces of thick fluid of a very offensive smell, and tinged with fæces. This gave us some encouragement, and I advised a repetition of the use of the bellows at night; also a pill every four hours consisting of a grain of the watery extract of aloes and two and a half grains of the compound soap and opium pill. Anodyne fomentations were ordered to be applied to the abdomen.

May 23rd. I received the following report from his surgeon. "Last evening matters were much the same, so I proceeded to 'blow him tight'; and he after a time declared that he thought his bowels would act; but they did not, so I gave him a pipe, and had the satisfaction when I went this morning to find that the bowels had acted three times; to which happy consummation I believe all the remedies had tended, and I think the pills you ordered had no small share in the transaction. I am extremely pleased with the present result of our labours, and hope all will go on well."

This young man had a tedious recovery, although the bowels continued to act under the use of the same pills. He became much depressed from the severity of his illness, and once or twice it seemed doubtful whether or not he would sink under it; nevertheless, in a few weeks he became much better, and gradually regained his natural health and strength.

Case xxxv. *Intussusception: Death.* Mr. W.'s infant, aged 7½ months, was struck on the head with a whip by a little boy who was playing near him, he himself being at the time seated on a chair for the purpose of having his bowels relieved. The blow was a slight one, but the child was frightened and perhaps a little hurt, and screamed for a time violently. Previously to this he had been in perfect health, and was rarely heard to cry. This occurrence took place on Saturday morning, September 24th, 1859. The screaming was soon followed by great depression and faintness, for which the medical attendant administered restoratives; soon afterwards vomiting commenced, and continued uninterruptedly until his death. The last matter vomited being described as what "ought to have come the other way." During his illness he frequently rolled his head about, and thrust his hand into his mouth; he was also frequently drawing up his legs and writhing as if in pain. It was supposed that the blow on the head had produced some cerebral mischief, and a leech had been applied to the temple. There had been no relief from the bowels from the commencement of the attack, but there had been much straining, and a small quantity of bloody mucus had several times escaped. I was summoned on Sunday the 25th, about thirty hours from the beginning of the attack, and the child was just dead as I arrived at the house. On hearing the above history, and searching the body externally for some cause of obstruction (for I thought the symptoms indicated intestinal obstruction) I found no hernia; but the abdomen was distended, and I could feel coils of bowel in several directions, which led me to express to the parents the idea which forcibly occurred to my own mind, that the child had died, not from any affection of the head, but from intussusception.

On the following day, the 26th, I met the family surgeon for the purpose of making a *post mortem* examination; and we discovered the following cause of the symptoms and of death. The descending colon appeared to be full of fæces to within an inch or two of the termination of the rectum, and the small intestines were empty and collapsed. On examining the distended portion, we found, at about the situation of the junction of the transverse with the descending colon, that the finger could be passed into a pouch of bowel leading downwards towards the rectum, the part above being very small—apparently small intestine. On removing all this enlarged portion of the bowel, we found that it contained, not fæces, but all the rest of the colon and cæcum. The cæcum had passed into the ascending colon carrying with it the appendix vermiformis, and had then travelled on as far as its connexions would admit, so that the cæcum, appendix, ascending and part of the transverse colon were invaginated in the rest of the transverse and descending colon and upper portion of the rectum; the invaginated portion being in a state of intense engorgement.

I append this case to the rest of the series on account of several points of interest which it possesses. First, as to the diagnosis: the blow on the head naturally led to the supposition that it was the cause of the screaming and pain in the first instance; and probably any medical man seeing the child at that time would have thought so. Then, with this impression upon his mind, many of the other symptoms would naturally confirm the opinion, for instance, the vomiting, rolling the head, putting up the hands, etc.; the difficulty of getting relief from the bowels also might be attributable to a like cause, as constipation is a very usual accompaniment of the cerebral diseases of infancy. I did not see the child until just after death; I heard the history from the parents, but had not the opportunity of seeing the surgeon who attended, and when I found the bowels distended in coils, and that bloody mucus had been discharged instead of proper motion, neither of which symptoms properly belong to cerebral inflammation, I came to the conclusion that the blow on the head which had been almost too slight to injure the brain, had suddenly startled the child and interrupted it in the effort of defæcation, that invagination then took place and gradually increased during the pain and straining which followed, and that the child died exhausted by the suffering thus produced. I mentioned my views to the surgeon who had attended and who kindly undertook the *post mortem* examination, but he seemed astonished and adhered rather to his first impression, although he thought the fatal event occurred much more rapidly than usual in cases of the kind. The appearances found after death cleared up all difficulties, and afford an additional proof of the value of distension of the abdomen and expulsion of bloody mucus as diagnostic signs of intussusception.

Exhibition of Croton Oil in Mania. Every practitioner is aware of the value of this active cathartic in the treatment of maniacal cases, and of the extreme difficulty which is often experienced in getting such patients to take either this or any other drug. They will at once detect its taste, which is certainly disagreeable enough if it is added to their ordinary food, and as far as taking it in the form of pill or draught, that is, in many instances, quite out of the question. The smallness of its dose appears to favour the idea that it can be dropped on the tongue and swallowed; but, independently of the great evil of restraining and exasperating a patient whilst thus dosing him, it is most difficult to apportion the dose, so as to give him a sufficient quantity, and yet not an excess; and also serious accidents are liable to occur to the eyes of the assistants, from the patient forcibly ejecting it whilst thus held down; indeed, I am disposed to think that such a mode of exhibiting croton oil ought to be employed only in very exceptional circumstances, if at all. Having some time since been obliged to exhibit it in acute mania, after every other means at my disposal had completely failed, it occurred to me to mix the oil with some sardines, as if for lunch, and I thus succeeded in getting it taken without further difficulty, the fishy taste of the sardines completely disguising the unpleasant flavour of the oil, and as the suggestion may be of use to others, I think it worth while to mention it. (*Dr. W. Frazer.*)

DR. BROWN-SÉQUARD'S
GULSTONIAN LECTURES
ON THE
DIAGNOSTIC VALUE AND MODES OF PRODUCTION OF THE VARIOUS SYMPTOMS OF DISEASES OF THE BRAIN.
DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY, 1861.

THE second lecture was delivered on Friday, February 8th. The lecturer commenced by recapitulating the positions laid down in the preceding discourse; namely, that the symptoms of diseases of the brain may be produced in three ways; as direct results of injury or disease of the organ; by alterations in the quantity or quality of the blood sent to the brain; or by reflex irritation, propagated either from distant parts, from the membranes of the brain, or from the brain itself.

Before proceeding to adduce facts in support of the statement that paralysis and other nerve-disorders may originate from distant parts, the lecturer noticed certain objections which might be urged against his views.

First: it may seem strange that injury of the brain should produce symptoms through reflex action, and not as a direct result, as has been hitherto believed. In reply to this, the lecturer called attention to the absence of symptoms in some cases where portions of the cerebral lobes have been disordered or destroyed, as contrasted with their presence, in a great variety of forms, in other instances of the like injury. It is strange, he said, that the observation of such a variation in the results has not been a death-blow to the common supposition. If we must believe that an injury of the cerebral lobes produces its symptoms in all their variety as direct results, then we must ascribe to one and the same part of the brain a great variety of functions, and even, in some instances, no function at all. It would be absurdly impossible to hold such a view. We cannot, indeed, explain the production of such a variety of symptoms from one and the same injury, unless we admit that some other part of the encephalon is submitted to an alteration which produces the symptoms as secondary effects; the forms varying according to the part to which the irritation has proceeded, so as to give rise to this or that form of paralysis, delirium, insanity, or convulsions. The brain itself, and its blood-vessels, are supplied with nerves like any other part. Why, then, should it be doubted that irritation within the brain itself may act in the same way in producing symptoms, as irritation arising from disorder of any other part of the body?

Another question may be raised in objection: How can the nervous phenomena, which are observed in most cases of injury of the brain, be produced in so great variety by irritation starting from the same point? It is a recognised fact that reflex phenomena, of most varied form, may be produced from irritation of the same kind, and apparently of the same part; or they may be entirely absent under the same conditions. For instance, prolapse of the womb may cause hysteria, paralysis of nearly any part of the body, catalepsy, chorea, epilepsy—in fact, almost every kind of nervous complaint; and sometimes in such a form as to closely simulate actual brain-disease. The same may be said of irritation of the bowels, as from worms. Such pathological facts as these (and also physiological facts) prove the truth of the assertion that irritation of the same part, and nearly of the same kind, may produce a great variety of symptoms; and if this be true of all distant organs of the body, it cannot well be otherwise with regard to the brain.

A third objection which might be stated was: How is it that irritation of the skin, bowels, or other organs, so frequently produces no nervous phenomena whatever except local pain? It is another law of reflex action that it sometimes does not take place, even though all the apparent conditions for its production are present. Tickling of the soles of the feet, in some persons, induces convulsions, or syncope, or asphyxia; in others, but little effect is produced. Further, the irritation of tickling may be borne by the same person at some times better than at others. M. Charcot has made some remarkable experiments bearing on this point. He has given small doses of strychnia to patients suffering from affections of the spinal cord, especially the slight softening attendant on deposit of fat in the blood-vessels. In a short time, the reflex phenomena were increased; but the effects on the paralysed lower limbs of tickling the feet varied greatly in character; and while, in the upper limbs and face, tickling of the feet produced no effect before the strychnia was given, the reflex actions were much increased after its administration. Hence, we may suppose that an irritation may act in a person in whom reflex power is very limited, in which case there will be no result; or the reflex power may be much increased in some one part, as in that by which blood is sent to the brain—in which case there will be epileptic vertigo, without convulsions; or in the part of the nervous centre (a portion of the medulla oblongata), which has the power of arresting the heart's action, and then syncope is the result. The great cause of difference in the phenomena produced is, then, that the irritation has found one part more excitable than another. This, Dr. Brown-Séquard observed, is not a new view; a similar view was put forward by Bright.

The lecturer now proceeded to adduce proofs of the statement that irritation of distant parts may produce symptoms of disease of the brain.

Abercrombie has divided the effects of tumours of the liver into seven groups, according to the symptoms; viz., 1. Coma preceded by headache; 2. Headache, with affections of the senses, speech, or intellect; 3. Headache, with affections of the senses, and convulsions; 4. Convulsions without affection of the senses: intellect sometimes impaired; 5. Head symptoms with paralysis—sometimes hemiplegia, sometimes paraplegia; 6. Prominent symptoms in the digestive organs; 7. Vertigo and transient apoplectic symptoms.

Now, there is something apparently very discouraging in this array of symptoms. But is it really impossible to arrive at a diagnosis? The lecturer would not depreciate Abercrombie; but he must observe that the tendency of the observations of this celebrated physician, which he had just mentioned, was to show the difficulties of the subject rather than to throw light on it. His facts were grouped in such a way as to render diagnosis almost impossible; parts entirely different having been arranged together. To form correct statistics of the effects of disease or injury of the brain, we must collect cases in which lesion has occurred in the same part, and then determine which of the symptoms belong to pressure, which to arrest of the function of the part, and which to irritation.

Of the many phenomena of brain-disease which may be produced by causes acting on the periphery, the lecturer would adduce only some of the principal.

Amaurosis, while it frequently attends disease of the brain, is very often produced by reflex action from the periphery—more often, perhaps, by worms than by any other cause. M. Davaine, in his treatise on worms, records twelve cases of the kind. In diseases of the encephalon, also, amaurosis is a very good instance of the production of symptoms through reflex action. Dr. Brown-Séquard had collected sixty-two cases of disease of the cerebellum in which it was present. When it is of reflex origin, its character is well marked; it comes and goes alternately, and may vary in degree, even within a few minutes. This liability to vary in intensity at different times is a law of reflex action, and has been observed by the lecturer in animals, in which he can at times produce epileptiform convulsions by irritating the nerves of the face, while at other times he fails. Amaurosis has also been produced by simple alteration of the blood; and has been recovered from when the blood-disease was removed. It may also attend lead-poisoning, or gastralgia; and is very frequent after parturition, but here it may be due to albuminuria. Injury to the frontal nerve will also produce amaurosis; hence Wardrop was led, in cases of this kind, to practise division of the nerve between the injured part and the brain. In all these cases the amaurosis is removable when the source of irritation is detected and remedied.

Deafness not rarely attends peripheric irritation; for instance, it may arise from worms.

General Anæsthesia may attend anæmia, chlorosis, lead-poisoning, gastric disturbance, and other conditions of irritation. Under such conditions, whether of peripheric origin or arising in the blood, in a case of paralysis, it is analgesia—insensibility to pain—that the patient has; not true anæsthesia, or insensibility to touch.

Delirium, in many instances, is found to be dependent on irritation. It may be produced by affections of the bowels, lungs, kidneys, gums, etc. Worms, or acute diseases of the bowels, may give rise to it; as may also all acute febrile diseases, especially acute arthritis.

Insanity may be produced by chlorosis, anæmia, chloroanæmia, urethral irritation, typhoid and intermittent fevers, worms, acute arthritis, lead-poisoning, mercurial poisoning, gastric irritation, affections of the uterus, pregnancy, parturition, etc. Regarding the production of insanity by urethral irritation, the lecturer referred to Lallemand's works on seminal losses and their influence in producing nervous complaints. He did not believe that the nerve-disorder is the result of the loss of semen (which is really very slight), so much as of the irritation in the urethra; and this seems probable, from the rapid removal, in some instances, of the brain-symptoms by cauterisation of the urethra, even without a diminution in the amount of semen. The subject of insanity will be more fully treated of in a subsequent lecture.

Coma may be produced by causes acting from without, as by worms. Hysteria may also give rise to it.

Convulsive Affections of various kinds may have a similar origin. That curious phenomenon, rotatory movement, evidently arises from a cause acting externally. Irritation of the auditory nerve will at once produce it; it has been observed in the human subject in cases of disease of the ear. Hysteria is often produced by peripheric irritation. Piorry has related a remarkable instance of prolapse of the uterus, in which the hysteria was alternately induced and removed by the replacement and the refalling of the organ. In other cases of prolapse, also, hysteria has been produced by merely touching the uterus. Epilepsy may be produced by any external cause; but this subject will demand future consideration. Other kinds of convulsive contraction, as of a limb, or of one or many muscles, may also be produced by the agency of external causes; as may also non-epileptic convulsions, as those following parturition. Catalepsy, chorea, tetanus, trembling — in fact, any disease of this nature—may depend either on an alteration in the blood or on irritation propagated from distant parts.

Paralysis, especially hemiplegia, may arise from peripheric irritation, as in dysentery, typhoid fever, measles, small-pox, pneumonia, sore throat, diphtheria, irritation of the reproductive organs in females, etc. Dr. Churchill, of Dublin, has given thirty-five cases of paralysis, of which twenty-three occurred during pregnancy, and twelve during or after labour. Of the thirty-five cases, there were eighteen of complete, and one of partial, hemiplegia; while there were also cases of paraplegia, deafness, amaurosis, and facial paralysis.

How can such a variety of forms of paralysis be produced by reflex action? When we remember that the nervous centres have blood-vessels provided with vasomotor nerves, and that the latter may act in a direct or in a reflex manner, we see clearly how the vessels in any part of the nerve-centres may contract under irritation. And, if this contraction occur in a part of the encephalon which presides over motion, paralysis will be produced. The most striking instance of this is where neuralgia of the fifth pair of nerves gives rise to paralysis of the third pair, either in whole or in part. Here, as has been pointed out by Marechal de Calvi and the lecturer, the irritation proceeds to certain parts of the encephalon, and is reflected to the blood-vessels of another part—it may be to a very limited extent, in which case the paralysis is limited. But, at the same time, an irritation from the same source may be reflected, not to the vessels of the brain, but to one of the muscles of the eye—as the internal rectus; so that there will be contraction of this muscle, while there is paralysis of one or more of the other muscles of the eyeball. The phenomena in both cases are the same; but in one the irritation has been reflected on blood-vessels, and in the other on a muscle.

DR. B. W. RICHARDSON'S

LETTSOMIAN LECTURES

ON

CERTAIN OF THE PHENOMENA OF LIFE.

DELIVERED BEFORE THE MEDICAL SOCIETY
OF LONDON, FEBRUARY 1861.

Dr. Richardson's first Lettsomian lecture, which was delivered on Monday evening last, treated of the subject of Oxygenation in Animal Bodies.

In commencing, Dr. Richardson said that the study of life, being the most profound of all subjects that could occupy the mind of man, has been approached by some with feelings of anxiety bordering on fear, while others have shrunk from it altogether, or have invented for its explanations terms which have only made obscurity doubly impenetrable—magnifying the sublime to its extreme effect, the paralysis of terror. The lecturer, however, wished to place himself in the position of those who, having by constant study made themselves familiar with the facts of life, had cast aside astonishment, and viewed the problem with the calmer, but not less manly feelings of admiration and reverence.

The problem of life may be considered in two ways: the metaphysical, whereby we consider life as an abstraction, and reason from the whole to the part; and the physical, in which we commence with the parts and endeavour to rise to the whole. The physical method was that which Dr. Richardson proposed to follow; and, in doing this, he observed that it was necessary to throw aside all preconceived notions regarding a specific vital force—the "*vis animæ*," "*materia vitæ*," "*vis insita*," etc.

Proceeding to the immediate subject of the lecture, Dr. Richardson remarked that oxygen has been generally regarded as a constructive agent. This constructive agency of oxygen, however, is to be regarded as but one of its properties—primary in regard to mass, but secondary in regard to the action of matter. Again, oxygen in combination is assumed to be in the same state as when free; but it is not so; and if oxygen could be reduced by pressure, cold, or other means, to a new and solid state, this would represent the condition in which it exists in combination with iron, or phosphorus, or mercury, etc. Nor is it correct to speak of heat, light, and electricity, as products of oxidation; but, when oxygen (or when steam) condenses, it does so at the expense of something lost which before gave it volume. Oxygen, as it appears in the form of gas, is a ponderable body diffused through an imponderable medium. Whether this be caloric, light, or electricity; or one of these, resolvable into the others; or a combination of them; or a separate force, resolvable into one or other of these—is a question difficult of solution. Nevertheless, Dr. Richardson believed that the force is one, the form in which it is evolved being determined by the nature of the agent with which the ponderable matter connected with the imponderable unites. Thus oxygen uniting with carbon produces heat and light; with hydrogen, heat and little light; with zinc, electricity; etc.

In regard to the animal body, the lecturer believed that the inspired oxygen unites with oxydisable materials, while both the oxygen, and some of the materials with which it thus unites, give up the imponderable body which preexisted in them; that thus the vital agent with which the air is endowed consists really of two parts—a material portion, constructive in its offices; and an imponderable substance, the active life-giving force. If this be true, every action disturbing the equilibrium of the mixture will modify the force of the oxygen in regard to combination; and, in fact, the power of oxygen to support life is modified by quantity, *i. e.*, concentration or diffusion: by temperature; by electricity; by modes of production; by respiration; and by the presence or interference of "catalytic" agents. Each of these modifying agencies was now examined in detail.

The effects of *quantity* were exhibited in five experiments, in which mice of the same size had been placed, at a temperature of 55° Fahr., in jars of a capacity of nearly 39 cubic inches, containing respectively (1) common air; mixtures of oxygen and nitrogen in the proportions of (2) 2 volumes of oxygen and 3 of nitrogen, (3) 3 oxygen and 2 nitrogen, and (4) 4 oxygen and 1 nitrogen; and (5) pure oxygen. The result is that the animals in common air and in jars (2 and 3) each die in about two hours. In jar (4) the animal becomes comatose in two hours, but does not die under six hours; and in pure oxygen, coma also takes place in two hours, but death follows two hours sooner than in jar (4). The oxygen, in the first three jars, is found to have been completely applied in the formation of carbonic acid; in the fourth jar, carbonic acid is also present, but about one-fifth of the mixture remaining consists of oxygen; while in the jar of pure oxygen, it is found that the proportion converted into carbonic acid is actually less than in the other cases; and so much available oxygen is left as will require five more mice for its complete exhaustion. This shows, as was guessed at first by Sir H. Davy, that combustion is actually diminished where we should *à priori* expect it to be most intensified. This has been both asserted and denied; but, according to Dr. Richardson, the discrepancy of opinion is explained by the effect of temperature on the result of the experiment. The explanation of the more rapid death in pure oxygen is rather obscure; meanwhile, the experiments shewed how admirably for the purposes of life the proportions of oxygen and nitrogen in the air are distributed.

The influence of varying *temperatures* in modifying the action of oxygen in its relations as a supporter of life are remarkable; and the neglect of this influence has given rise to many contradictions among experimentalists. If one animal be placed in a jar of air, and another in a jar of the same size containing four volumes of oxygen and one of nitrogen, both being at a temperature of 20° Fahrenheit, the animal in air dies in forty minutes or an hour, while the other lives to the end of the hour, or even five minutes beyond. This fact was first observed by Beddoes. When one animal is placed in a jar of pure oxygen, and another in a jar of common air, and the temperature is reduced to 20° Fahrenheit, the animal in the oxygen dies, on an average, one-third sooner than the one in common air. Dr. Richardson had also caused rabbits to inspire common air and oxygen cooled by passing in tubes over a freezing mixture to 20° Fahr. The results were, drowsiness, a gradual cessation of the heart's action, and death; the latter event taking place in twenty minutes in the animal breathing air, and in fifteen minutes in that breathing oxygen. Hence, cold destroys the sustaining power of oxygen; but not from mere constringent action on the pulmonary capillaries. A certain increase of temperature prolongs life in pure oxygen; thus if (all things being equal) one animal be placed in oxygen at 50° Fahr., and another at 70° Fahr., the former dies in three or four hours, while the latter remains conscious three hours, and may even live twelve hours. Again, certain high temperatures appear to equalise the time of death in pure oxygen, and in any mixture of the gas with nitrogen. This is observed by plunging the jars containing the animals into water at 125° Fahr. But, if the temperature be gradually raised from 90° to 120°, life is somewhat more prolonged in the animal placed in common air. While the animals, in both these cases, are exposed to the heated air, the transparent parts of the body become vividly red, and, a few minutes before death, almost purple. After death, the blood on both sides is found of a reddish purple colour. In larger animals, as the cat, the same conditions are induced at a higher temperature (140°).

Thus, extreme cold and heat both destroy the life-sustaining properties of oxygen; cold, by removing from oxygen its imponderable part and preventing combination; heat, by imparting over-activity to the oxygen. In the first case, the muscles are rendered rigid, even before death; in the second, they are relaxed beyond the power of contraction.

The effects of *electricity* on oxygen are shewn by the following experiments. If two similar animals be placed, each in an equal quantity of oxygen, at the same temperature, and a moderate supply of electricity be passed into one jar, the animal breathes with more freedom, and lives for a much longer period than the other. But if sparks of electricity be passed into a jar from a large induction coil—so as, in fact, to raise a tornado in the jar—the animal is soon seized with tremors, rapid breathing, and convulsions, and dies.

The *source of production* of oxygen has been asserted by Schönbein to affect the properties of the gas; oxygen obtained from oxide of manganese being held to possess more active properties, and that from peroxide of barium less active properties, than that in common air; while a mixture of the oxygen from these two sources represents a middle condition. The most active form Schönbein has termed ozone: the least active, antozone; reserving the name oxygen for the intermediate form. If three animals be immersed at 60° Fahr., in jars filled respectively with each of these substances, the animal in the ozone will, after very rapid breathing and excitement, followed by coma, die first. The animal in antozone will live about one third of the time longer than that in the ozone; the coma, however, setting in at the same period, but the excitement being less marked. The animal in common oxygen lives about one-fifteenth longer than that in antozone; and the coma preceding death is much less profound. When the gases are examined after the death of the animals, the ozone presents most evidence of having been applied. A temperature above 75° removes the distinction in the effect of these various forms of oxygen.

Dr. Richardson next related the results of a series of experiments, from which he had found that oxygen, being repeatedly used, loses its property of supporting life. In 1852, seeking to determine the cause of the conflicting statements of Beddoes and Broughton, the former of whom held oxygen to be an excitant, the latter a depressant or narcotic, he caused dogs and cats to breathe the gas, which was supplied to them in a continuous current so as to avoid the admixture of carbonic acid. The temperature was 60°. They became excited and thirsty, and lost appetite; the surface and mouth were hot; the breathing was quickened; and twice, in dogs, Dr. Richardson heard distinct crepitation, as of pneumonia. Death occurred in from twelve to fourteen hours, from obstruction of the cavities of the heart by fibrinous coagula. The tissues and organs were brilliantly red; the venous blood was of arterial colour; and in some cases there was inflammatory exudation in the lungs. One animal had all the signs of croup; and after death the windpipe was found to contain plastic exudation. In repeating the experiment on a rabbit, in the same way, Dr. Richardson found that no material change beyond loss of weight was produced, at the end of two periods of nine and twenty-one days respectively. During the experiment there was often a brilliant vermilion tint of the ears, and when the animal wanted food the breathing was more hurried; on two occasions it became oppressed, but revived when the stream of oxygen was driven through a little more rapidly.

The same results being repeatedly produced, Dr. Richardson placed a dog, a kitten, a rabbit, a pigeon, and three frogs, in a chamber through which oxygen was driven; the result being that the frogs and rabbit were unaffected, while the others either died or were greatly prostrated. It appeared that animals with the quickest respiration die soonest in active oxygen. Further experiments, however, had led Dr. Richardson to modify his views as to the effect of oxygen being connected with the respiration of the animal.

Having filled one of two reservoirs with oxygen, he determined, in order to economise, to re-collect the oxygen which had passed through the chamber containing the animals; passing it over an alkaline solution to remove carbonic acid, and over sulphuric acid to remove ammonia. Arrangements were made for thus passing and re-passing the oxygen several times. He then placed a cat, a dog, a pigeon, and a rabbit, with two frogs, in a large chamber; and commenced passing the oxygen through the chambers at the rate of 2000 cubic inches per hour. In six hours, the whole of the primitive oxygen, *minus* nearly 1000 cubic inches which had been lost in respiration, was transferred into the second reservoir. The gas having been found to give no reaction to lime-water, was washed thoroughly with potash, to be received once more into the first reservoir. As the first charge of oxygen was passing through the chamber, there were exhibited signs of excitement; but, as the second charge passed through, all the animals became depressed and drowsy. After four hours, the current was again changed, the oxygen being purified most carefully. It now became obvious that every animal was under some depressing influence; even the rabbit did not escape. The symptoms were entirely different from those arising from carbonic acid. The breathing was quick, but easy and tranquil. There was not the slightest approach to convulsion. The pigeon buried its head under its wing, and simply drooped and slept. The four-footed animals sat with their fore-legs straight and their heads between them, nodding as if in profound and pleasant sleep; they were aroused with difficulty, and fell off again in an instant. Then the fore-legs slowly gave way forwards as if paralysed; and, before the third charge of the oxygen was three parts over, the pigeon was dead, and the kitten was nearly dead: the dog gave no sign of sensibility, but breathed softly: the rabbit was fast asleep. The frogs alone were unaffected. A little air pumped out of the chamber through lime-water, gave less indication of carbonic acid than the common air. The animals being removed, a lighted taper placed in the chamber burned with more brilliancy than in the air, but with slight yellowness of flame. The animals were all nearly dead. The kitten died a few minutes after removal; the rabbit recovered in two hours; the dog seemed paralysed in the limbs for the greater part of the day, but recovered. When the bodies of the pigeon and the kitten were opened, there was found no indication of asphyxia. The lungs were inflated and red; the heart contained blood on both sides, but the blood in each side was of the same hue, neither being very dark; the brain was bloodless; the other organs were natural. Other experiments of a like nature, and presenting similar results, were related. In two of them, cooked animal food, placed in the chambers for the use of the animals, underwent rapid putrefaction and evolved a most intolerable stench; while pieces of the same food left in the air remained perfectly sweet.

The experiments shewed, the lecturer observed, that at an uniform temperature the re-inhalation of oxygen destroys its active or combining property; and this is further proved by the fact, that the effects of the spoiled gas may be arrested and removed by adding to the air of the chamber a little fresh active oxygen.

Certain Agents, by their presence, prevent oxygenation in animal bodies. The combination of oxygen with a substance may be prevented or disturbed by a third body, which in some cases has a more powerful affinity for oxygen, while in others it undergoes no change. Under the term catalysis, modifications of the latter kind had been long described; but the late Dr. Snow first pointed out the great extent to which this action of catalysis influences life. Some of the agents which thus affect the oxidation process in the animal body are external to the body, including all the known narcotics and some other substances; while others are produced within the body, as ammonia, and perhaps other substances with which we are as yet unacquainted. That such agents prevent oxidation, was shown by Dr. Richardson in some simple experiments. A small quantity of chloroform diffused through a jar of oxygen prevented a taper from burning; the addition of a little ammonia prevented the decomposition of iodide of potassium and starch by peroxide of hydrogen. The effects of extreme cold, Dr. Richardson said, are analogous to, if not identical with, those of the catalytic agents in preventing animal oxidation.

In conclusion, the lecturer pointed out the relation of his inquiries to the practical study of disease. All through the lecture, he said there had been a synthesis of diseases, and an analysis of the remedies.

The production of coma by deprivation of oxygen explained the immediate cause of coma, in whatever form presented. Coma is the result of the cutting off the supply of blood, or of the removal of the active property of this fluid. Sleep (as Mr. Durham has pointed out) and convulsions also recognise the same explanation.

The effects of excessive heat show that the same force that destroys the magnetic property of oxygen also destroys its power of combination; and *coup de soleil* is represented in the laboratory as under a tropical sun.

The effects produced by raising a tornado in a glass jar illustrate, only more intensely, the symptoms produced by powerfully electrical atmospheres on the prostrated man.

The varying effects of oxygen—excitant or depressant—according to its source, point to the nature of so-called epidemic influences; showing how an ordinary attack of disease may become developed into an acute animal conflagration, or into its adynamic representative. The experiments show also that impure air in confined rooms means something more than carbonic acid; it means a tendency of the air to produce death without reconstruction—putrefaction.

Finally, the observations on catalytic agents showed not only the *modus operandi* of narcotics, but also that the poison in various zymotic and diathetic disorders stops existence by arresting oxidation—by giving rise to an asphyxia commencing in the blood.

Society of Arts. At the meeting held on Wednesday night last, Dr. Copland in the chair, the paper read was on "The Uses of Tea in the Healthy System", by Dr. E. Smith. The author began by stating the opinions brought forward by Professor Johnstone and other chemists on this subject—views which were still very generally held. These might be summed up thus: that by the use of tea—1. The waste of the body is lessened; 2. The body is nourished; 3. By lessening waste, we may lessen supply, and yet the bodily powers shall be duly sustained. He stated his reasons for differing from these statements, and explained the nature of the experiments which he had undertaken in order to ascertain the actual effect produced by tea. If there be an abundance of food in the system, and that especially of the farnaceous or fat kinds, tea is a powerful digestive agent, and, by promoting the transformation of food, it aids in nourishing the body; but with a deficiency of food in relation to the waste of the tissues by exertion, or the waste of heat by cold or by too profuse evaporation from the skin, it wastes the tissues of the body, and lowers the vital powers. He therefore considered that it was not suitable as a partial substitute for food, as was generally supposed; for it increased the waste of the body. It was not suitable for persons of spare habits, or while using exertion; nor was it adapted for men in low temperatures, or where the action of the skin was defective. Dr. Smith concluded his paper (which was illustrated by a diagram showing the results of his experiments) by giving some detailed directions as to the choice of tea, and the best method of preparing the infusion.

British Medical Journal.

SATURDAY, FEBRUARY 16th, 1861.

SYPHILIS: ITS NEWEST PHASE.

The name of M. Ricord, in connexion with venereal diseases, has been familiar to us all for a quarter of a century. His real discoveries, his seductive discourses, and his earnest convictions, have, more or less, made his opinions as to the nature of venereal diseases the opinions of the profession at large during that period. Not that the acute and resolute surgeon has ever, at any time, had his entire swing as an universal authority. He has always met with opponents; but, nevertheless, until late years, has contrived to keep their opposition in due subjection. The school of Ricord has, indeed, been very triumphant. This is easily explained. Previously to his day, the history of syphilitic disease was a complete *imbroglio*, full of vagueness, conceits, and opposition; and to him, undoubtedly, belongs the immense merit of reducing order out of the chaos. He tested the nature of syphilis by inoculation; and thus laid, in positive fact, a basis upon which he might rest his doctrines. His deductions, indeed, were, in the most important particulars, true; but mingled with them were assertions to which, as we have said, there have always been objectors.

More lately, with the advance of knowledge, the faulty items of his conclusions have been more warmly debated, and more nearly combated; so combated, in fact, as now to leave no doubt of their error in the minds of candid investigators, who have not too deeply pledged themselves to the support of Ricord's views. In thus reducing erroneous opinions to their true dimensions great credit is due to Mr. Henry Lee, who by labouring in this field of medical practice, has himself contributed some very important and original facts to the general stock of our knowledge concerning syphilis. The profession is, indeed, much indebted to him for a valuable article on syphilis, to be found in the pages of the *System of Surgery*. Mr. Lee is our guide in what we have now to say about these diseases. (*System of Surgery*. Edited by Mr. Holmes.)

Most of our readers know well what are the so-called doctrines of Ricord: That blennorrhœa and chancre are two entirely distinct diseases; that chancre yields a specific virus; that from blennorrhœa never comes constitutional syphilis; that an indurated chancre always produces constitutional disease; that a non-indurated chancre is simply local, and never followed by secondary disease; that chancre is the sole origin of syphilis; that pus from a primary affection is the only contagious element of the disease; that no secondary or tertiary disease can be communicated by contagion; that blennorrhœa may arise spontaneously, and never produce any disease but blennorrhœa. Now, the main error (as it would appear) in these deductions of Ricord's is, that chancre is the only origin of syphilis; and the error, of course, invalidates three of his propositions. We may, indeed, receive it as demonstrated, that certain secondary and tertiary syphilitic diseases are, under given conditions, inoculable. But let us now follow out Mr. Lee's views.

In considering the constitutional affection of syphilis, we must remember that there are two absorbent agencies in the body—the absorbents and the blood-vessels. When the absorbents are mainly affected by the disease, rarely if ever does secondary syphilis ensue; and, again, the best marked symptoms of constitutional disease are rarely ever preceded by any evident signs of inflammation of the absorbent glands. When the absorbent vessels are affected, we may trace the progress of the syphilitic virus along them up to the nearest lymphatic gland; and at any point of such vessels chancres may be formed; but there is no proof that the poison can run its course through the gland and come out unchanged, *i.e.*, still an infecting poison. Evidence goes altogether to show the contrary. And, besides, the physiological character of the glands—their power of digesting, of altering the character of the matters which pass through them—strongly supports this view.

Guided by these physiological considerations, supported as they are by practical observations, Mr. Lee considers that the Hunterian doctrine of the absorption of the syphilitic matter by the lymphatics is erroneous, and that it is in the process of nutrition that the poison (when it is absorbed) is taken up *by the blood*. Then comes the important and practical question: how shall we decide in any given case whether the poison will be taken up or not? If the chancre is soft, says M. Ricord, the poison will not be absorbed; if hard, it will. Touch, then, is to decide the point; and M. Ricord claims for himself a peculiar tact in distinguishing this hardness, which other practitioners, it appears, do not possess.

In a short course of lectures published by Mr. Lee in the pages of the Journal of the British Medical Association for the year 1853, Mr. Lee pointed out a more sure and satisfactory mode of distinguishing a chancre that would produce constitutional syphilis, from one that would not. He there says, referring to this distinction, "In one case the appearances are, in their origin, those of the adhesive inflammation; in the other, of the suppurative inflammation; and these constitute two very different classes of disease, both in respect to the local affections and their constitutional consequences" (Nov. 29, 1853). The suppurative inflammation produces a secretion which can readily be inoculated, with the point of a lancet, on any part of the patient's body a great number of times. The product of the adhesive inflammation, on the contrary, after that action has been fully established, can scarcely, and only under exceptional circumstances, be inoculated a second time. *The suppurative action is not followed by any constitutional symptoms, but the adhesive is.* Mr. Lee admits that the indication derived from the condition of the base of a sore is one mode of distinguishing its true character; but he attaches far more importance to the nature of its secretion. The microscope here comes to our aid, and furnishes a very delicate and elegant method of diagnosis. But, in order that its testimony may be relied upon, care must be taken that the natural secretion of the sore only be examined. This may generally be done by dressing the sore with wet lint for a day or two, and by preventing the secretion of the neighbouring parts from becoming mixed with those which properly belong to the chancre. It will then be found that the secretion of the suppurating non-infecting sore (which is readily inoculated again upon the patient), will upon the addition of a little acetic acid present the nuclei characteristic of true pus. The space of each cell (the cell-wall having been dissolved by the acid) will be occupied by one, two, or three of the nuclei, all of the same size, and so arranged as to show that they were contained in cells of the same diameter. The secretion of the infecting sore (the product of the adhesive form of inflammation) when mixed with acetic acid and examined in the same way, will, on the contrary, not present the characteristic nuclei of pus. It usually consists of epithelial *débris* floating in a transparent fluid, or if there are any cells, these will be found of various shapes and sizes, becoming often opaque on the addition of the acid, and not unfrequently matted together. This secretion, as has been said, cannot be inoculated (except under some peculiar circumstances) upon the patient from whom it is taken; but the action which produces it, will, if left to run its course, certainly produce constitutional syphilis.

We thus obtain proof positive that there are different kinds of primary syphilitic affections; and we derive from the fact several important conclusions, one of the most important of which is, that, in the process of syphilisation, the action produced by inoculation is of quite a distinct nature from that by means of which the disease was originally communicated. The artificial inoculation always produces the suppurative action, whereas the disease which infects the system is the adhesive.

Actions alone are here spoken of, whether these depend upon different poisons, or whether they arise from the same poison under different circumstances.

It would be vain to attempt to cure syphilis by inducing the *same* action as that by which it commenced. The inoculations would produce no effect. Syphilisation consists in causing a series of processes different from that which produced the original disease, and such as would not, if left to themselves, cause any constitutional affection. Another very important deduction from the distinctions now established is, that although inoculation is a ready way of distinguishing a suppurating, non-infecting syphilitic sore, from an ordinary ulcer, *it is of no value at all* (*except in some rare instances*) *in determining the character of the primary infecting sore.*

The doctrine promulgated a few years ago, that when the secretion of a sore could be inoculated mercury should be given, is now therefore exploded; or, rather the reverse of this is shown to be true, for if, under ordinary circumstances, a sore yields a secretion which produces a specific pustule, that sore will not infect the patient's constitution, and therefore does not require mercurial treatment.

The non-inoculability of the secretion of the infecting sore—of the sore presenting the adhesive form of inflammation—was first pointed out by Mr. Lee, in the *British and Foreign Medico-Chirurgical Review* for October 1856, and has been subsequently (as he tells us) fully confirmed by Ricord, Fournier, and other French surgeons.

So slow, however, is the progress of real science, that even as late as the year 1858, M. Ricord, in his *Leçons sur le Chancre*, fails to draw a distinction between the inoculability and mode of development of the two kinds of chancre. At page 31 he says: "Ce que je viens de dire, messieurs, de l'inoculation et des developpements du chancre, se rapporte presqu'aussi bien à l'une qu'à l'autre de ces variétés." It appears, however, now fully proved that not only is the action which produces the infection of the patient's system different from that which does not produce infection; but that the time at which the results appear after inoculation in the two cases may be, and generally is, very different also. Many cases are referred to by Mr. Lee, in which a period of incubation of four or five weeks occurred before the primary adhesive inflammation (the infecting sore) showed itself, and during this period, as pointed out by Mr. Lee, it would be vain to attempt to destroy the virus by caustic, because at that time there is no indication of any local disease, and, consequently, no guide as to the part to which the caustic should be applied.

Moreover, it has now been fully proved, as before mentioned, that secondary and tertiary syphilis may be communicated by contact, and here again a period of incubation of some four or five weeks generally occurs. The form in which syphilis derived from secondary inoculation shows itself very much resembles the primary chancre. M. Diday, of Lyons, has attempted to distinguish syphilis derived from a primary sore from syphilis derived from a secondary affection. M. Rollet, who has given much attention to this subject, and has recently written a very able work upon it, agrees with Mr. Lee that, independent of the history of the case, it would often be impossible to say, from its physical characters, whether the poison had been derived from a primary or a secondary syphilitic sore.

Besides the suppurating, non-infecting sore, and the specific adhesive inflammation which infects the patient's system, two other classes of primary syphilitic sores are recognised by Mr. Lee. One of these is that which has already been alluded to, in which the absorbents carry the inoculable poison as far as the first lymphatic gland, where it is retained and produces a suppurating bubo. This may with propriety be called "lymphatic absorption", and corresponds with Hunter's idea of "ulceration". The last class includes all those cases in which, from any cause, either natural or artificial, the parts contaminated by the syphilitic poison die before either the adhesive or the suppurative actions have been established. In this case the death of the tissues involves the destruction of the poison which they contained.

We have thus at length placed before us a description of four distinct kinds of primary syphilis in a clear and intelligible manner, and will give Mr. Lee's conclusions respecting them in his own words:—

> "Four varieties of action have now been described as resulting from the inoculation of syphilitic poison. These are quite distinct, although they may occasionally succeed each other.
>
> "1. The first of these is accompanied by the adhesive inflammation (the infecting sore), and produces a chronic enlargement of the inguinal glands. This enlargement does not involve the skin or surrounding cellular membrane. This variety is followed by secondary symptoms, and requires, both in its primary and secondary forms, mercurial treatment.
>
> "2. The second variety is accompanied by suppurative inflammation. It does not affect the inguinal glands, is not followed by constitutional disease, and requires only local treatment.
>
> "3. The third variety is accompanied by the ulcerative inflammation [or, more properly speaking, by lymphatic absorption]. It produces suppuration, generally in one inguinal gland only. It is not followed by constitutional syphilis, and may be treated by local means.
>
> "4. The fourth variety is attended by mortification. It does not affect the inguinal glands, is not followed by constitutional symptoms, and requires only local treatment."

Such are the very important conclusions arrived at by Mr. Lee. We have thought it our duty to bring them prominently before the notice of the profession, because, if true, the practical views generally held concerning the treatment, etc., of chancre must undergo very serious modifications. That they will be eventually found correct, when more fully tested by the experience of the profession, we feel quite satisfied. They have already been subjected to many years of proof, and they have received the assent of capable observers not too deeply pledged to Ricord's doctrines. Mr. Henry Lee's well known cautious and skilful powers of observation are also a guarantee to us of the correctness of the views he maintains.

THE WEEK.

We are glad to say that the reports circulated concerning the failure of the operation upon Sir B. Brodie's eye are much exaggerated. His medical attendants, we learn from good authority, have sanguine hopes that the operation will be, to a considerable extent, successful.

We have before us the report of the annual meeting of the trustees of the Liverpool Northern Hospital; and it is gratifying to see the improvements which are taking place in regard to its internal management. Some time age, attention was drawn in this Journal to certain frauds which had been practised on the hospital by one of its vice-presidents. Since the discovery of this misappropriation of its funds, a new committee have been appointed, of which the medical board now form a part; whereas before, they were entirely unrepresented in it. New rules have been formed, and the building has undergone a thorough repair. Members of the medical staff, and in fact all present, bore testimony to the improvements which had taken place in the hospital. New wards are to be immediately opened. We sincerely congratulate the committee on the results of their labours.

Mr. Acton, in his letter on Infanticide, does not answer the position we assumed. If his argument were just, this queer conclusion necessarily follows: that it is the duty of mothers in the upper ranks of society *not* to suckle their children, because by the non-performance of their maternal duties they prevent a number of *falling* women from passing into the past tense of *fallen*, by employing them as wet-nurses. This is very strange logic; and, as we see it, neither more nor less than the patronising of a great evil to produce an hypothetical good. Let us first settle this question: Are mothers who are well able to suckle their children justified, on any grounds, in delegating that duty to others? When Mr. Acton has answered this question, we will meet him on the contingency which arises out of it. This is a question which surely admits of a plain answer. We are very pleased to find, that Dr. Hall Davis gives a very strong affirmative to it. We only wish that he had told us, whether or not the practice of wet-nursing is, in his opinion, more frequently resorted to than is necessary, and with the permission, if not at the instigation, of the medical attendant.

A second Protest against the proceedings of the Lieutenant-Governor of Guernsey in placing a globulistic artist at the head of the medical staff of the militia in that island, has been sent to us.* The gentlemen who have appended their names to the document deserve the thanks and the countenance of the whole profession. If such a proceeding were allowed to pass unchecked, there is no abuse of a similar kind which may not in future be elsewhere perpetrated under similar circumstances. It is, we venture to think, a matter which deserves the serious attention of the Medical Council. That Council is now the guardian of the high interests of the profession, and as it is only through its voice that the profession can in future hope to operate upon the legislative body and upon governmental authorities, that voice ought now to make itself heard at head quarters. It is something too absurd to think that the dignity and honour of our profession should be seriously compromised by the stupid folly of some testy old military chieftain or cabinet minister, who may, not unlikely, in a matter of this kind, be actually led by the nose by some petticoated admirer of globulistic subtilties.

"Guernsey, February 4th, 1861.

"Sir,—I have the honour to acknowledge your letter of the 1st instant, inclosing copy of the General Militia Order of January.

"I request you to inform the Adjutant-General that, under existing circumstances, I perform all duties attached to my commission under protest.

"I request also that you will inform the Adjutant-General that I protest against the formation of the Medical Boards (as detailed the G. M. O. above mentioned), as irregular, and at variance with the G. M. O. of October 15th, 1844, which directs that 'the Medical Boards are henceforth to consist of one staff-surgeon, one regimental surgeon, and one regimental assistant-surgeon;' the said G. M. O. of October 15th, 1844, being unrescinded. "I have the honour to be, etc.,

M. A. Bazille Corbin,
Surgeon G. R. Militia Artillery.

"Capt. William Bell, Assistant-Inspector G. R. Militia Artillery."

"Guernsey, February 7th, 1861.

"Sir,—The appointment of the Medical Boards being the first occasion this year that we have been called upon to act in our military capacity, we avail ourselves of this opportunity of requesting you to inform His Excellency the Lieutenant-Governor that so long as Dr. Ozanne's name is retained on the muster-roll of the Royal Guernsey Militia and in the Army List, we feel compelled to perform all the duties connected with our commissions under protest, it being impossible for us to cooperate in any manner for the benefit of the public service with an avowed professor of homœopathy.

"We have the honour to be, etc.:—M. A. Bazille Corbin, Surgeon G. R. M. Artillery; F. C. Lukis, Surgeon 1st Regt. G. R. M.; John Roberts, Surgeon 4th Regt. G. R. M.; B. Collenette, Assistant-Surgeon 2nd Regt. G. R. M.; Francis E. Carey, Assistant-Surgeon 1st Regt. G. R. M.; Geo. H. Thurston, Assistant-Surgeon G. R. M. Artillery.

"Colonel White, Adjutant-General Royal Guernsey Militia."

A general meeting of the Metropolitan Association of Medical Officers of Health is to be held this (Saturday) evening, at half-past seven, at 8, Richmond Terrace, Whitehall. A highly important subject will be brought forward at the instance of the Vestry of Paddington, viz., "The best means to be adopted and enforced for preventing the entrance of sewer-air into houses, especially those inhabited by the upper classes." The subject will be introduced by Dr. Sanderson, who will submit a series of propositions for discussion.

A plan for reducing hernia, lately successfully practised by Mr. Jessop of Cheltenham, has been repeated with equal success by Mr. Bowman at King's College Hospital. Before proceeding to operate, Mr. Bowman "placed the patient on his head and shoulders, the pelvis being raised in a vertical position. The tumour had not been compressed between the hands for more than half a minute, before a portion of gut suddenly receded."

Our readers will remember the tale which we lately told them about the differences of Edinburgh University and Colleges of Surgeons and Physicians. We have now to state that the Privy Council has confirmed *simpliciter* the report of the Commissioners, so that the aforesaid objecting Corporations will take nothing by their appeal—University going out Best man. This conclusion is a grand one for the University, and also one of very great importance to the general practitioner of the country, and to medical education generally. In future, one examination, one curriculum, and one fee, will enable a man to receive from the University of Edinburgh a degree both in medicine and surgery (M.B. and C.M.), qualifying him for general practice. The decision is in our opinion founded in sense and in justice, accords with the liberal spirit of the times, and will, we think, be gratifying to the profession at large. Surely, at this time of day, such a school of medicine as that of Edinburgh University ought to be able to turn out a man qualified for all the purposes of his profession.

Some months since a subscription was set on foot by several graduates in medicine of the University of St. Andrew's, with the view of presenting to Dr. G. E. Day, the Chandos Professor in the University, a testimonial of respect and confidence for the ability and good feeling which he has displayed in his position, and in recognition of the progressive improvements in the examinational system which he has so judiciously introduced, and which are being prosecuted with so much vigour. There can be no question that, since the appointment of our associate Dr. Day, to the principal professorship in the University, the *prestige* of the institution has greatly and deservedly increased. Practitioners desirous of the honour of being able to add M.D. to their names, but who are unable to re-enter on a formal curriculum of study, can there obtain their wishes; and that the degrees thus obtained are not conferred as mere compliments, is evidenced in the high scientific and practical tone of the examination papers, and in the well-known public and professional character of the examiners, Drs. Day, Pyper, W. T. Gairdner, Alexander Wood, G. Buchanan, A. Anderson, and J. Matthews Duncan, and Mr. Connell. We trust that the graduates of the University will respond to the appeal made to them, and their appreciation of Dr. Day's exertions. It must be borne in mind that the result of these exertions, though immediately affecting the reputation of the St. Andrew's University, has, in reality, a much wider range; for, in the course which he has followed, Dr. Day has cooperated in the great work of raising the condition of medical education throughout the profession.

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* Our readers will remember that Drs. Hoskins, De Lisle, and Mansell, have already resigned their appointments—refusing to march in the company of a homœoquack.

L'Union Medicale gives us the following excellent words of criticism on the late peculiar works published by M. Michelet.

> "*La Mer*, by M. Michelet, is one of the same family with those works with which this author has during late years so abundantly supplied the literary world—we cannot say the scientific world; for, under the poetic and sensitive pen of M. Michelet, science assumes an ideal form, under which neither savans nor observers can recognise her. What results can come of such publications? We are sorry to say we cannot think them satisfactory. They are bad and defective instructors of the ignorant; they disturb and render dissatisfied those who think they know something; they give to the language of science an affectation, a sentimentalism, a littleness, which tend to its enervation, and destroy its character of clearness and precision. It is sad to see so eminent a mind dissipate his faculties in the production of these romances of natural history and physiology. Strange, indeed, that a school should have arisen in literature and the arts, which pretends to materialise that which from Homer to Lamartine, from Apelles to Ingres, has been so well left in the region of the ideal. Modern *realists* have attempted this revolution; and now comes M. Michelet, who endeavours to revolutionise in an opposite direction! Where *reality* is a thing of necessity, he would enthrone *ideality!* Vain are both revolutions. The human mind, spite of all efforts, will never cease to quench its thirst at the pure and eternal sources of poetry. The works of M. Michelet on natural history will be forgotten, but those of Cuvier will last for ever. Yet there is a sensitive heart in all these works of his, something deeply human; so that criticism drops its weapons, and has not the courage to say to the good, amiable old man, 'Take care! you are misleading poetry and misinterpreting science!'"

The following interesting facts, related in the last Report of the Medical Officers of the Small-Pox Hospital, are worthy of note.

> "The medical officers stated that, in their last annual report, they had to call attention to the epidemic of small-pox, which had then been raging with greater intensity than had ever occurred before since the foundation of the hospital in 1746, there having been 91 patients in the hospital on December 31, 1859, while the the number was only 27 for the corresponding period last year. The influence of that epidemic, however, had been felt in a marked degree during the past year up to July last, although there was some abatement in June; and consequently for more than half the year the average rate of admissions had been more than 105 a month, while for the remainder of the year it had only been about 27 a month. Of the 875 patients admitted during the past year, 858 were cases of small-pox, one being a case of secondary small-pox—an attack of the casual disease after inoculation, and 17 cases of other eruptive diseases; of these 858 cases, 161 had occurred to unvaccinated persons, and 697 to those who had been vaccinated; the proportion of the vaccinated being, therefore, as large as 81 per cent. The number of deaths which had occurred—123—gave a mortality of 14 per cent. on the gross admissions; but one of these persons had died of disease of the lungs, another of scarlet fever, and nine were attributable to superadded or hospital disease. The mortality among the 161 unvaccinated cases was 56, or 34·78 per cent.; while among the 697 cases, it was but 66, or 9·46 per cent. The number of patients vaccinated at the hospital during the year had been 310."

Special Correspondence.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

I feel compelled, in the first place, to imitate your Birmingham correspondent, by expressing the universal pleasure that is here felt at the improved tone of the Journal. With the best opportunities of ascertaining, I cannot hear of a single dissentient voice on this point. The really scientific spirit infused into your leaders, reviews, and notices, has given great satisfaction to those who look for something more than mere medical gossip; and there are many among us who believe that, if the present standard be maintained for a year or two, the Journal will become a source of profit rather than of impoverishment to the Association.

Our county Branch maintains well its character as a real bond of fellowship between its members. The next annual meeting is to be held in Liverpool; but it is deeply to be regretted that we cannot have more frequent district reunions of a more strictly scientific character. It is well to have the means of discussing our grievances and of advocating reforms at our large annual assemblages; but the standing of our Association would be greatly elevated if there were more frequent opportunities for the introduction of subjects directly bearing on the practice and science of our profession. Three or four hours *per annum* will hardly avail for this. We have, it is true, in Manchester an excellent Medical Society in connection with the Royal Institution, of which many leading associates are members. For the last year or two, it has been conducted with great spirit, though even its monthly meetings during the winter only seem insufficient for such an extensive district as this. The library in connection with it is becoming very valuable, and will soon be one of the first medical reference libraries in the kingdom. At the last meeting it received a noble addition, in the gift of the obstetric collection so long and judiciously accumulated by Dr. Clay. Few medical men have the ability or the liberality to make such a bequest to their profession during their lifetime. It would add much to the good of our Association, and to that of the Medical Society, if some means of amalgamation could be hit upon.

The Manchester and Salford Sanitary Association, which, though not purely medical, is mainly indebted to the profession for its success, has been doing good service during the past year. It has organised a weekly registration of disease, similar to that carried out by the London Medical Officers of Health; and these returns cannot but prove highly valuable to the cause of science, as well as in forewarning individual practitioners of the approach of epidemics. The ready assistance given by the medical staff of all our public institutions in preparing these returns, is highly honourable to the profession in Manchester; and it would be well if the example were followed by other large cities throughout the country.

These data have shown, what was also to some extent evident from the Registrar's Mortality Lists, that the past twelve months have been the healthiest we have enjoyed for many years. The zymotic diseases have been almost absent during the whole of that time, with the exception of measles, which were rather prevalent in the spring of 1860. Diphtheria cannot be said to have yet attacked this district. During twenty-six weeks, eighteen have been returned as quite free from it; seven with one case only; and one with three. So that, taking into account the prevalent tendency to give a new name to serious cases of throat-affection, of which tendency instances have come under my observation, we can hardly be said to have suffered from the same disease that has played such havoc in many other districts.

A discussion, likely to become very important, has been begun upon the sanitary condition of our Infirmary. Mr. Roberton's papers, so favourably reviewed in the Journal, have been taken up by the general daily press; and his statistics of mortality in our Infirmary have led many to the conclusion that it will be necessary to remove it to the suburbs. He is, no doubt, an enthusiast on the subject of ventilation; but he has shown quite sufficient to call for a most searching investigation. Many of your readers will be acquainted with the splendid building (in site and outward appearance, at any rate) referred to, and to which Jenny Lind munificently added a wing some years ago. But if it be really the case, that the mortality after surgical operations is exceptionally and unavoidably high, there can be but one opinion as to the necessity of a change, *coûte qui coûte*. One thing is certain, that the supply of hospital accommodation in Manchester is miserably proportioned to the wants of its vast population, and is unworthy of the usual munificence of its merchant princes.

An amusing episode in the discussion has been the avidity with which the homœoquacks have seized the opportunity of bringing themselves before the public in connection with it. One of the fraternity inserts a long letter in the *Guardian*, calling on the public to try his *system* before anything else is done; and, at the same time, betrays his knowledge that the whole body of them are "at loggerheads with one another", and that few of them will even so much as meet in consultation. You are perhaps aware that this is one of their great strongholds. The combination of wealth, with ignorance of physical science, in so many here, will, no doubt, to some extent, account for this; but the foolish overbelief in drugs, and the ignoring of cause and effect in ascribing actions to them, is chiefly to blame. We have nearly thirty homœopaths, many of them with very lucrative practices; while in Glasgow, a city almost parallel in size and character, there is but one, and he, I believe, doing almost nothing. The only possible cause I can assign for this is, that in the latter city the medical profession entirely withdraws itself from the dispensing of drugs, and has taught its patients to trust more to Nature, and to believe in brains rather than bottles.

The British Association is to meet here this year, and our profession is not unrepresented. The only Manchester medical contribution, however, that I am as yet certain of, is one by Dr. Roberts, who continues indefatigable in his researches on urinary and other chemico-vital questions.

EDINBURGH.

DEBATE ON AMYLOID DEGENERATION: CASE OF LEUCOCYTHÆMIA; DIABETES TREATED WITH SUGAR.

At the last meeting of the Medico-Chirurgical Society, Dr. Grainger Stewart read a paper upon the waxy or amyloid degeneration of the kidneys. He endeavoured to show that the primary affection is that change in the coats of the arteries which Virchow described as the amyloid degeneration, and that resulting from this is a secondary lesion; viz., an exudation into the uriniferous tubules and cortical substance which has been recognised by various authors as the lardaceous, bacony, or waxy disease. He then gave an account of the symptoms which he had observed in cases of the affection, and which he thought might be found on further investigation characteristic of it, and detailed several cases by way of illustration. He considers that the onset of the malady is marked by feebleness and unfitness for exertion, and by an increased flow of urine, of low specific gravity, but otherwise normal; that after a time the urine contains a small quantity of albumen, and a few hyaline tube-casts; that there is more or less derangement of the stomach and intestines, the diarrhœa being sometimes very severe; that the liver and spleen are, in many cases, enlarged; but that no dropsy appears till the case approaches a fatal termination. In this condition the patient may remain for a longer or shorter period; but sooner or later the amount of the urine diminishes, and dropsy comes on, and the patient sinks either exhausted, or with the symptoms of uræmic poisoning. Dr. W. T. Gairdner remarked that the symptom, increased flow of urine, which Dr. Stewart considered so important, might be found to be of great use in diagnosis; but that he felt great difficulty in determining what Bright's disease actually was. He inclined to think it essentially neither fatty degeneration, nor waxy degeneration, nor any other special form, but any of these with the essential element catarrh of the uriniferous tubules superadded. Professor Bennett remarked that he considered the great increase in the amount of urine a most important symptom, and that he himself had frequently observed it in some cases of Bright's disease. He insisted strongly upon adhering to the old term waxy degeneration; he said that it was stated that in the course of the degeneration an amyloid substance was produced; but in what respect was it amyloid? It had been asserted that a solution of iodine and sulphuric acid turned it blue; but that was not the fact; for even those who had most faith in it confessed that they could not always produce it, and he (Professor Bennett) had examined it very often, but had never seen the blue colour. He thought, therefore, that the name amyloid should be rejected, and the excellently descriptive term waxy retained. Dr. Haldane said that he had also found the reaction test unsatisfactory, for, although he occasionally obtained the blue colour, he more generally produced merely a reddish hue. He argued that the amount of urine should, *à priori*, be expected to be below rather than above the normal average, for that the thickened walls of the vessels would hinder the access of blood to the cortical substance, and so diminish the amount of urine. He referred to the recent observations of Virchow and of Beale upon the distribution of the arteries in the kidneys, which show that all the arterial blood does not, as Bowman supposed, pass through the Malpighian bodies; but that some passes directly to the arteries of the cones. Dr. Haldane thought that if the cortical substance was shut off from action, these vessels would become dilated and admit of a freer transudation of fluid. Both the paper of Dr. Stewart and the remarks made afterwards were of some interest, and seem to clear the way for a fuller knowledge than we have hitherto possessed of Bright's disease.

In the course of the debate upon the communication, a secondary discussion arose as to the utility of diuretics in the treatment of acute nephritis. Drs. Bennett, Keiller, and Gairdner said that in their experience that plan of treatment was not only safe but very advantageous, and that they used it in every case without any unfavourable result; an experience utterly opposed to the theory and practice advocated by Dr. G. Johnson and other London authorities on kidney-disease.

In the clinical wards of the Royal Infirmary there is at present under Dr. Bennett's care an interesting case of leucocythæmia, with bronzing of the skin. The patient, aged about 55, was a furnaceman, and about sixteen years ago, from alternate exposure to heat and cold, became affected with eczema over his whole person except the head and neck. As the eczema continued, the skin became much thickened, and in the legs the disease presented the characters of ichthyosis. After a time, the lymphatic glands connected with the affected parts became enlarged, and still later symmetrical patches of bronzing appeared on both sides of his body. On admission, the whole body, arms, and legs, were covered with chronic eczema; the glands of the popliteal space, the groin, the axilla, and those above the elbow were greatly enlarged; the skin of the groins and pubes was of a dark bronze colour in both axillæ, and spreading over the chest towards the middle line were patches of the same colour; the face was of a dingy hue, as well as the scalp to about the size of the frontal bone. The spleen was not enlarged, and other organs were healthy. The blood presented a great increase of the white corpuscles, these corpuscles varying considerably in size, and being generally smaller than the normal average. For the last three months alkaline lotions have been sedulously applied to the whole surface, with the effect of very materially improving the skin, and, in the opinion of the patient, the general health, the glands having become smaller, although the blood remains in the meantime as at first. This case is of deep interest, and may, perhaps, throw some light upon the bronzing of the skin, which was so ably investigated by Dr. Addison.

Another case of Dr. Bennett's, which has excited considerable interest is one of diabetes mellitus, in which the sugar treatment has been adopted. The patient is a shepherd from Perthshire, and enjoyed good health till about a year ago, when this illness began. There is no pulmonary nor other complication, beyond occasional cramps in the legs; the appetite is voracious and the thirst great. The daily amount of urine is about 200 oz., of specific gravity 1035 to 1045. He was at first kept under careful observation for some time, to make sure that the effects of hospital regimen should not be mistaken for those of drugs. During that time his urinary symptoms were unchanged, but his general health became worse. After about a fortnight, Dr. Bennett ordered him half a pound of sugar daily, a plan of treatment first suggested by M. Piorry two or three years ago, and more recently tried by various physicians in this country with varying success. In this case the result has been that the patient has gained flesh, and increased in weight and vigour, while his urine has continued much in the same condition as formerly, and no evil effect of any kind has appeared. In other cases which have been treated in the same way in Edinburgh, similar favourable results have been obtained; the plan of treatment is coming into favour, and promises to be an immense boon to those afflicted with this intractable malady.

Surgery in San Francisco. Dr. E. S. Cooper, writes: "A short time prior to my last communication to you, I ligated the arteria innominata. To-day is the thirtieth day, and the patient has every prospect of recovering, so far as could be judged by any other evidence than that based upon the results of past experience of other surgeons. I had to remove the external extremity of the clavicles and the right side of the summit of the sternum, to cut off both attachments of the sterno-mastoid muscle, to dissect away part of the lower extremity of the scalenus anticus of the sterno-hyoid and sterno-thyroid muscles, before it became possible to ligate the vessel." Violent hæmorrhage occurred on the twentieth day, which, we learn, was repeated, and proved fatal. (*American Medical Times.*)

The Charité Hospital in Paris. A plan has been organised for rebuilding this hospital in the rue des Saint Pères, so as to increase the present number of beds (350, of which 250 are for males, and 100 for females).

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, February 4th, 1861.

A. B. Garrod, M.D., F.R.S., President, in the Chair.

CLINICAL DISCUSSION.

Warming Apparatus for the Sick-Room. Mr. **Streeter** exhibited a simple apparatus which he had found useful in the sick-room. It consisted of a contrivance by which a saucepan was suspended by a wire-ring over an ordinary night-light.

Division of the Ciliary Ligament. Mr. J. W. **Barnes** related the histories of three cases in which he had performed Mr. Hancock's operation of division of the ciliary ligament. He said that, although some had described this operation as having been borrowed from that of Von Gräfe, it was both theoretically and practically different. He deprecated the conduct of some surgeons, as Mr. Solomon of Birmingham and Mr. Nunneley of Leeds, who, he said, had merely made unimportant changes in the operation, and had thereupon given it new names. Mr. Hancock's operation he commended as being exceedingly simple, and free from injurious results, which could not be said of iridectomy. In Mr. Hancock's operation, there was no sloughing of the eyeball, no injury to the lens, except through the fault of the patient; and the appearance of the eye was not destroyed, nor was pain caused to the patient beyond a moment or two. He differed from Mr. Hancock as to the presence of spasm of the ciliary muscle; but he agreed with this surgeon in believing it necessary to divide the whole band of connexion between the sclerotic, cornea, choroid, and iris. The ciliary constriction in glaucoma, hydrophthalmia, etc., was probably the result of the abnormal state of the circulation and vessels of the part, and of the effusion of lymph or blood. It was then of little consequence whether there was spasm or atrophy of the ciliary muscle. The operation was not only suited for glaucoma, but had also been performed in hydrophthalmia, conical cornea, staphyloma, iridochoroiditis, etc. The first case was that of an old woman aged 72, who had, a year and a half ago, paralysis of the left side, from which she recovered. Two or three months since, she found that she had lost the sight of the right eye. There was partial opacity of the cornea, especially at the lower part; the pupil was fixed, and not affected by light. In a strong light, she could only distinguish the presence of an opaque body. After operation, which was performed on December 4th, 1860, the cornea cleared a little. In eight days, she could see the bars of the window, and the fingers when held before her eyes. Beyond this, no further progress had been made—probably on account of the opacity of the cornea, which still persisted. The second patient was an old lady aged 78, who, from a fall down stairs on December 15th, had severe contusion of the head and face, and much effusion of blood under the scalp above the left temporal ridge. On January 16th, she sent for Mr. Barnes, as she had lost the sight of the right eye. The organ presented a perfect specimen of glaucoma; she could not see the light of fire, nor of a candle placed before her eyes. On January 20th, four days after operation, she could see the bars of the window, and the branches of a tree across the road; but no further improvement had taken place. In the third case, a woman, aged 68, lost sight after three attacks of rheumatic inflammation of the eye, being able to distinguish only between daylight and darkness. The eye appeared longer in its antero-posterior direction, from a constriction in the situation of the ciliary ligament; the conjunctival vessels were congested and tortuous; the globe felt harder than natural; the iris was slightly irregular and altered in colour, and was not affected by light; and there was muddiness of the deep-seated parts. The operation was performed on December 4th, 1860, and was attended only with the accidental effusion into the anterior chamber, which was soon absorbed. In three weeks, the patient could read print almost as well as with the other eye; and, at the time of reporting the case, the sight continued good.

Mr. **Hulke** was not aware that Mr. Hancock had ever been accused of borrowing from Von Gräfe. The great difficulty in dealing with Mr. Hancock's cases was the extreme vagueness of the diagnosis; and the same might be observed of two of the cases related by Mr. Barnes. With regard to the change in the antero-posterior diameter of the eye, Helmholtz and Donders had shown that it is shortened in glaucoma; and any one might observe this for himself. He (Mr. Hulke) had, in many cases of glaucoma, found the ciliary muscle atrophied; hence spasm of this muscle could not be an essential part of the disease. As to the value of Mr. Hancock's operation, he observed that in many cases it had, as a means of tapping the eye, been followed by benefit; which was, however, not always permanent. On the other hand, he could bring forward cases in which iridectomy had been performed, and where the patients could do needlework. The latter operation was not attended with the danger of wounding the lens. In about one hundred and fifty cases in which he had performed it, he had wounded the lens once only, in the endeavour to remove some lymph behind the iris. He questioned the freedom of Mr. Hancock's operation from danger, as he had been told of cases in which it had been followed by suppuration of the eyeball.

Ascites in a Child. Mr. Henry **Smith** had been requested by Dr. Waite to see a child, aged 7, with the object of determining as to the propriety of tapping it for ascites. The child was evidently strumous; it was emaciated, and the cervical glands were enlarged. There was much fluid in the abdomen, which could not be traced to any of the causes ordinarily producing dropsy in children. The child had been brought to Dr. Waite six months previously, in the same state. The fluid had then been removed under the use of purgatives, cod-liver oil, etc., but had returned, and the readministration of similar remedies had failed to remove it. Mr. Smith objected to tapping; and recommended the use of iodide of potassium, with five-minim doses of tincture of digitalis, and purgatives. In three weeks, the urine had become very copious, and the fluid was diminishing. Dr. Waite and Mr. Smith had examined the urine, but found no albumen; there was no history of scarlet fever or of measles. No enlargement of the mesenteric glands could be detected; but there was rather severe pain in the abdomen on the right side.

In the discussion which followed, the points adverted to were the administration of large doses of tincture of digitalis, and the pathology and treatment of cases of the kind related.

With regard to the tincture of digitalis, the **President** said that he had given three half-ounce doses in eighteen hours; but this was in delirium tremens, and he would only give three or four such. He had never seen the commonly described depressant effects, except from the long continued use of small doses. As to the safety of large doses, and to the uncertainty of the strength of the preparation (which had been referred to by Mr. Streeter), he thought that the success of Mr. Jones of Jersey, extending over a period of ten or twelve years, was a sufficient answer. Dr. W. R. **Rogers** had also used tincture of digitalis in large doses with benefit and safety; and had also given it to children.

As to the case itself, Dr. **Rogers** had never seen tapping necessary in so young a child, although he had seen several of the kind described. These were generally benefited by tonics, especially iodide of iron. He thought there must be some disease of the liver or mesenteric glands in Mr. Smith's case. Mr. Streeter recalled two cases of tapping in children which he had seen. In one, Sir A. Cooper had evacuated the ascitic fluid through a puncture in the scrotum. In the other, he (Mr. Streeter) had tapped with an exploring needle. Dr. Salter thought that the dropsy depended on disease of the peritoneum or of some of the abdominal viscera. There might be either subacute or chronic strumous peritonitis; or enlargement of the mesenteric glands pressing on the mesenteric veins and adjoining parts. The differential diagnosis of these, when the abdomen was distended with fluid, was difficult; but the treatment was much the same in both cases, and would consist chiefly in the use of antiscrofulous remedies, such as cod-liver oil and iodide of potassium, and the application of iodine ointment over the abdomen. Dr. Hare had seen some cases of the kind; the last was in a child four years old, who was somewhat strumous, but not emaciated nor very unhealthy in appearance: the glands were not enlarged. His treatment consisted in brisk purgatives and cod-liver oil: under the use of which, the dropsy, though obstinate for a time, at last disappeared.

Correspondence.

CHILD-MURDER AND WET-NURSING.

Letter from J. Hall Davis, M.D.

Sir,—A question having been raised and for some time past agitated, on the relative merits—in default of the maternal supply—of wet-nursing and artificial feeding in the rearing of infants, and especially as to the sufficiency in such circumstances of the latter method, I deem it to be the duty of all who have had extended and special means of judging, to state the result of their experience in a matter of such vital importance.

In common with others of my professional brethren, my opinion has often been appealed to, and my decision taken, on the safest mode of nourishing an infant; and I may observe, if you will allow me the space in your columns to do so, that I have invariably expressed a very strong and decided preference—admitting there to be any choice at all—in favour of the practice, especially in crowded cities, of nourishing a child at the breast of a healthy wet-nurse.

I have had frequent opportunities of witnessing the ill effects of artificial feeding, even in cases where it has been conducted with the greatest possible care—in the delicate and sickly constitutions, in the various forms of degeneration, as mesenteric disease and its consequent atrophy, hydrocephalus, etc., which have sooner or later developed themselves in such circumstances.

Children so nourished I have further found, as might be anticipated, to have no power of resisting any endemic or epidemic influence to which they may become exposed. I have seen many marked instances of this. The children in a family, who have been well nourished at the breast of their mother, or by a healthy wet-nurse have survived, when those who have been reared by the artificial method have succumbed under the same illness.

The physician, when consulted on the rearing of the infant, has occasionally to act against his better judgment, and is requested to give directions on the best system of artificial feeding. This has occasionally been my case, and then I have recommended asses' milk as the best substitute, or in the absence of that diet, the best milk that can be obtained from one cow. This, when not previously so qualified by the dealer, requires the addition of a third of its bulk of warm water, and should be sweetened with a little white sugar, and raised to blood heat by immersing the feeding bottle in hot water for a few minutes. As a rule, I strongly object to the addition of any farinaceous matters to the milk till the child has reached to about six months of age. Where the milk is not sufficiently good, I am in the habit of recommending the addition of a little cream. In some cases, I have seen goats' milk agree well with the child. I am willing to admit that a *small* proportion—the stronger children, and those who have the benefit of country air in a healthy situation—may thus be nourished satisfactorily; but the more delicate infants, and those living in towns, with few opportunities of visiting the country, rarely thrive on any artificial mode of rearing, and are sacrificed in large numbers.

Upon the ethical question, which has been much discussed of late, on the propriety of making our selection of a wet-nurse from the ranks of unmarried women, I do not profess to argue. Where the physical qualifications of two candidates—a single and a married woman—are equal, I should be disposed myself to prefer the former; but the choice here is usually made by the parents of the child to be nursed.

If an unmarried woman presented herself for the situation, exhibiting decidedly superior qualifications for the duty of wet-nurse, I should without a doubt give her the preference over the married candidate.

Moreover, it must not be lost sight of, that there is often a difficulty in securing the services as wet-nurse of a respectable married woman.

Lastly, I may observe, that I hold it to be the sacred duty of every mother, when fully qualified for its efficient performance, to nurse her own child, and that the only rightful indication for the engagement of a wet-nurse—which too often I know implies the sacrifice of her own offspring to the system of artificial feeding—is a well ascertained inability on the mother's part to afford to her infant its natural supply.

I am, etc., J. Hall Davis, M.D.
Physician to the Royal Maternity Charity, etc.,
Vice-President of the Obstetrical Society.

London, Feb. 11th, 1861.

CHILD-MURDER AND WET-NURSING.

Letter from William Acton, Esq.

Sir,—In common with those who have taken a deep interest in the subject of infanticide, I have remarked with regret, that within the last twelvemonths the crime has increased in the metropolis, and yet the cause has not been discovered.

In serious sadness let me ask, has not Dr. Graily Hewitt, in the last number of your Journal, alluded to at least one of the causes which may have materially contributed to this increase of child-murder, when he says:—

"The board of the British Lying-in Hospital, considering that it is advisable to refrain as far as possible from encouraging the employment of wet-nurses, except in peculiar cases, Resolved — Any person desirous of engaging a wet-nurse, at, or by means of this hospital, must produce a certificate from their medical attendant, stating that, for the safety of the mother or child, it is absolutely necessary that a wet-nurse be engaged."

The readers of your Journal are, then, to understand, that the public board of at least one London charity, plumes itself upon having cut from under the trembling feet of the *falling*, not *fallen* woman, what may often turn out to be the last and only plank remaining between her and destruction.

I used to cherish the fond but, alas, delusive hope, that our poor erring sister, too often "*more sinned against than sinning*," although seduced, deserted by her paramour, a wanderer in the streets, until within a few days of her confinement, would be taken into a parturient ward in some such institution, and there, in shame and sorrow and seclusion, bring her bastard into the world; and that in this asylum, her pangs happily over, such an one (were her character otherwise good) might find, perchance, a fair opening for her return to the paths of virtue, by becoming the wet-nurse to the child of one more fortunate, but also more enervated.

In former communications, I have related several instances of women having thus again become valuable members of society, instead of sinking into the lowest depths of vice; and my statements have been happily re-echoed by many distinguished accoucheurs.

To deter the timid from employing these *selected* women, a cry was attempted to be got up about the influence of *immoral* milk. I thought this had been for ever silenced by the many recorded instances of children having been reared on asses' milk, without manifesting any of the stubbornness of the foster mothers.

But as one phantom is dispelled another arises; and in the last number of your Journal, your readers are led to infer that Mr. Acton entertains the belief that wet-nursing encourages infanticide, and quotations to the same effect are given from the opinions of Mr. Wakley, and Dr. Bachhoffner.

I at once repudiate having made any such assertions. In common with the above-named gentlemen, I have certainly myself had to remark on the rapidly increasing frequency of the crime of infanticide. My investigations, I regret to say, all tended to prove that the mother of an illegitimate child (if unassisted) is not able to support herself and infant, and truth obliged me to avow, that not only did the child too often perish, but the mother's health was found irretrievably injured.

I was among the first to point out that *shame, starvation*, and a *recklessness of consequences* too often led, *not the wet-nurse*, but the unassisted mother of the bastard, to commit infanticide; and I further called public attention in the *Statistical Journal* for Dec. 1859 (p. 492), to the fact that juries, aye, and even judges, almost always admit extenuating circumstances. In fact, instead of my investigations leading to the inference that wet-nursing tends to infanticide, I there stated, openly and advisedly, my belief, that in the present state of the bastardy laws, the acceptance of the situation of wet-nurse offers a chance to a woman otherwise destitute of rearing her illegitimate child, by *putting aside out of her wages* money to bring it up by hand. As I have said above and here repeat, without some such assistance her child will too often be doomed to die, and her own health to be irremediably damaged.

It is on these broad principles, I maintain, that the profession should discuss the question of wet-nursing,—if it would continue its march in the van of all social and sanitary reforms, abreast of the statesman and the political economist. I am, etc.,

William Acton.

17, Queen Anne Street, Cavendish Square, Feb. 1861

Medical Appointments Vacant. Consulting Physician to the Elizabeth Fry Refuge, by the death of Dr. Bentley; Physician Extraordinary to the Queen, by the death of Dr. William Baly; Lecturer on Medicine, St. Bartholomew's Hospital; Assistant Physician to St. Bartholomew's Hospital; Surgeon to the Coventry and Warwickshire Hospital, at Coventry, vacant by the resignation of Nathaniel Troughton, Esq.; Surgeon, Puerperal Charity, Bath; Resident Surgeon, Birmingham Lying-in Hospital and Dispensary for diseases of women and children; Surgeon to the 13th regiment of foot, vacant by the death of James Jackson, M.R.C.S. Eng.; Assistant Surgeon, her Majesty's 12-gun sloop Persian, by the death of William Young Hewison, M.D., Assistant Surgeon, R.N.; Dentist to South Hants Infirmary at Southampton.

Medical News.

APPOINTMENTS.

Greenhalgh, Robert, M.D., appointed Surgeon to the Samaritan Hospital.

Hudson, Alfred, M.B.T.C.D., elected Physician to the Meath Hospital and County Dublin Infirmary.

Robert, Dr. Melchior, elected principal Surgeon of the Hôtel-Dieu at Marseilles.

Royal Army. The following appointments have been made:—

Dempster, Staff-Surgeon J. C., M.D., to be Surgeon-Major.

Docker, Staff-Surgeon E. S., to be Surgeon-Major.

Royal Navy. The following appointments have been made:—

Bremner, John T. U., Esq., Surgeon, to the *Crocodile*,

Clarke, Vans C., Esq., Surgeon, to the *Melpomene*,

Courtenay, Joshua P., Esq., Surgeon, to the *Hero*.

Wilson, William T., Esq., Surgeon, to the *Himalaya*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Barwell, R., Esq., to be Surgeon 19th Middlesex R.V.

Clement, W. J., Esq., to be Surgeon 1st Administrative Battalion Shropshire R.V.

Coulson, Walter, Esq., to be Surgeon Inns of Court R.V.

Harling, R. D., M.D., to be Assistant-Surgeon 1st Middlesex A.V.

Parsons, D. W., Esq., to be Assistant-Surgeon 64th Lancashire R.V.

McKeand, J., Esq., to be Surgeon 19th Lancashire A.V.

To be Honorary Assistant-Surgeons:—

Faircloth, R., Esq., 1st Cambridgeshire Mounted R.V.

Gradwell, W., Esq., 29th Lancashire R.V.

Kingsford, E., Esq., 45th Middlesex R.V.

Vincent, J., M.D., 15th Norfolk R.V.

BIRTH.

Of a son, the wife of—

*Birch, S. B., M.D., Kensington, on February 5.

DEATHS.

Beaman. On February 11, at 3, Henrietta Street, Covent Garden, aged 2, Frank Paterson, son of George Beaman, Esq., Surgeon.

Bishop, John G., M.D., at Monk Sherborne, Hants, aged 71, on February 12.

Browne. On January 27, at Wymeswold, Leicestershire, aged 29, Marianne Woodruffe, wife of Marshall Browne, Esq., and eldest daughter of *B. W. Browne, Esq.

Floret, Dr., at Lyons, aged 59, on January 11.

Gely, Dr., Surgeon to the Hôtel-Dieu at Nantes, on January 14.

Goodson, William, Esq., Surgeon Royal Navy, aged 95, on Feb. 8.

Lauth, Dr. H., at Barr, on January 25.

Morison, Alexander C., Esq., late Surgeon Bengal Native Infantry, at Aucherfield, near Edinburgh, on February 5.

Price. On February 7, in Marsh Street, Elizabeth, widow of Wm. Price, Esq., Surgeon, of Walthamstow.

Roberts, William F., Esq., Surgeon, late of Moreton-in-the-Marsh, at Bristol, aged 60, on February 7.

Robinson. On February 8, at Portsmouth, Amelia, widow of the late Benjamin Robinson, M.D., 12th Royal Lancers.

Small. On December 24, 1840, at Beawr, Rajpootana, James A., infant son of D. H. Small, M.D.

Stedman. On February 12, at Guildford, aged 16, Annie Ellen, elder daughter of *J. R. Stedman, M.D.

*Tracey, Harry, Esq., at Dartmouth, on January 12.

Willems, M., formerly Surgeon-Major of the French Army, Burgomaster of Saint-Josse-ten-Noode, near Brussels, and Knight of the orders of Réunion and of the Legion of Honour, aged 75, lately.

University of Oxford. In a Convocation holden on Thursday, February 7th, Arthur Leared, M.D. T.C.D., was admitted to the *ad eundem* degree.

Complete Absence of the Vagina. At a meeting of the Society of Surgery (Paris) M. Verneuil related a case occurring in the practice of Dr. Patry in which, in a girl seventeen years of age, there was an entire absence of the vagina, when the usual general phenomena of menstruation took place. An artificial vagina was established. The patient has been married eight years, and continues to menstruate regularly, but has never been pregnant.

Army Medical Qualifications. We understand that the Secretary-at-War has decided that the two qualifications, one in medicine and one in surgery, required from candidates for the medical service of the army, must continue to be obtained from separate bodies.

Royal College of the Mauritius. The Duke of Newcastle, as Colonial Secretary, has appointed Dr. Guthrie, now the Senior Chemical Assistant in the University of Edinburgh, to be the Professor of Chemistry and Physics in the College of the Mauritius.

The late Dr. Baly. At a meeting of the pupils of St. Bartholomew's Hospital on February 7th, it was resolved to raise a fund for the purpose of obtaining some suitable memorial of the late Dr. Baly. Dr. Burrows, senior physician to the Hospital, has undertaken the duty of treasurer.

Estimation of Magnesia in presence of Alkalies. Scherer converts the whole into neutral sulphates and weighs, re-dissolves in a small quantity of water, and divides into two equal parts; in the one he determines the magnesia by phosphate of soda, and in the other the potash by bichloride of platinum. The soda is estimated from the difference.

University College. It is stated that the new class of "Animal Physiology" for non-medical students, under Mr. Marshall, is likely to prove a successful experiment; the class is attended not only by students, but by a large number of members of the Schoolmasters' Social Science Association, who desire to make physiology a subject of instruction in their schools.

Influence of Syphilis on the Reparative Process. Sigmund, of Vienna, states that during his experience he has not observed any influence produced in the reparation of wounds of the soft parts, or of fractures, whilst the patient was suffering from constitutional syphilis, nor from the mercurial treatment generally pursued by him.

Medical Practitioners in Prussia. At the end of 1859 there were for the entire Prussian kingdom, 1 physician to 4,099 inhabitants, 1 surgeon (an inferior practitioner) to 10,823, 1 apothecary to 11,602, and 1 midwife to 1554 inhabitants. Of course the proportion differs in different parts of the kingdom, and in the capital is as follows: 1 physician to 953 inhabitants, 1 surgeon to 4,477, 1 apothecary to 11,710, and 1 midwife to 3,198. (*Berlin Med. Zeit., No.* 45.)

The Parisian Hospitals. In consequence of the retirement of Messrs. Ricord and Guersant, and the death of M. Després, the following changes have taken place in the staff of the Parisian hospitals. M. Cusco is transferred from the Salpetrière to the Hôpital du Midi; M. Broca is appointed to the Bicêtre; M. Giraldès, to the Hôpital des Enfants malades; M. Follin, to the Salpetrière; and M. Depaul, to the Enfants assistés. MM. Depaul, Follin, and Broca were surgeons of the *bureau central.*

Lunatics. In the House of Commons a few days ago, Mr. Walpole asked the Secretary of State for the Home Department whether he proposed to bring in any Bill for amending the laws relating to lunatics, pursuant to the recommendations of the Select Committee made to the House last session. Sir G. C. Lewis said a Bill on the subject was in preparation, and he hoped to be able to give notice of it upon an early day. He would take that opportunity of stating that he believed the Lord Chancellor intended to introduce a Bill in the other House of Parliament relating to Chancery lunatics.

The Ether Patent. The *North American Medico-Chirurgical Review* states that the Commissioner of Patents at Washington, has refused to renew the patent issued to Dr. Morton and Dr. Jackson, fourteen years ago, for the exclusive employment of ether to induce anæsthesia in surgical operations. The patent expired on the 12th of November, 1860, and Dr. Morton, some months since, applied for an extension of the patent for a period of seven years. Such a boon should be as free as the air of heaven. It is strange, that Dr. Morton, after having achieved so wonderful a discovery, should have been so insensible to his fame as to seek for a patent right. Poverty is a thousand times preferable, under such circumstances, to the most inexhaustible riches extorted from the groans of the people. We (*North American Medico-Chirurgical Review*) sympathise with him in his poverty, brought on, as he alleges, by his attempts to introduce the use of ether, as an anæsthetic agent, to the notice of the profession and the public, and we think it is a burning shame upon our country and upon the age, that our national legislature has not made him a liberal compensation for his great and inestimable services.

Ointment of Tannin and Morphia for Hæmorrhoids. I have for some time substituted an ointment composed of tannin and morphia for the old and well-known "gall ointment with opium," in the treatment of piles. I was led to do so from observing that powdered opium when mixed with the gall ointment was always so gritty as to form positively a painful application to the inflamed hæmorrhoid, more resembling a coarse sand or grit than the soft and emollient ointment which it is intended to be. Nor had I succeeded in obtaining much more satisfactory results by substituting the watery extract of opium for the crude powder; in fact, the watery extract does not mix at all well with oily preparations. I was thus led to employ an ointment composed of tannin and lard, adding from one to five grains of either the acetate or muriate of morphia to every ounce of ointment, having previously well rubbed the morphia with a little oil in a mortar. The amount of tannin which is used may be varied as may seem desirable; from ten to thirty grains will usually be sufficient for an ounce of either lard or spermaceti ointment. I find that the resulting compound is a satisfactory substitute for the old formula, and there appears to be no valid reason why an extemporaneous ointment of tannin might not in every case replace unguentum gallæ of the pharmacopœia. (*Dr. Frazer.*)

Ringworm. The following conclusions, respecting ringworm, are arrived at by Mr. J. Hutchinson, in a valuable paper in the *Medical Times.* 1. True ringworm, or tinea tonsurans, may be defined as a disease affecting either the scalp or the general surface, in which circular patches are formed, on which the hairs break off short, and a slight, branny desquamation is seen, both hairs and epidermic scales exhibiting under the microscope the sporules and thalli of a fungus. 2. Ringworm in the scalp is rarely seen, excepting in children; but on the general surface is not very unfrequent in young adults. 3. It is contagious, and spreads by contagion only. 4. It is not attended by any peculiar form of dyscrasia, but on the contrary, often attacks children in perfect health. 5. It is much more easily curable on the general surface than on the scalp, owing to the circumstance, that in the latter situation the fungus has obtained access to the follicles of the hairs. 6. Being a purely local disease, ringworm does not require, *per se*, any constitutional treatment. 7. A purely local treatment, if efficiently pursued, is always, and rapidly successful. 8. Epilation, and the use of one or other of the known parasiticides, are the measures of treatment required. 9. There is no real difference between ringworm on the scalp and ringworm on the general surface. 10. Ringworm, although not unfrequently causing minute vesicles, has no true analogy with herpes.

Cod-Liver Oil Pills. We are happy to be able to announce to the profession, that this problem, which has for a long time fruitlessly engaged the attention of pharmacists, has been definitely solved, and cod-liver oil may now be exhibited in a tasteless, inodorous and *solid* form. Physicians are sometimes backward in prescribing cod-liver oil as a remedy for the rusty and often immovable mechanism of the human lock, on account of the natural repugnance shown by patients to its taste, odour, and oily nature. Numerous messes have been invented and described for doing away with its nauseous qualities; indeed, one person who used to advertise, in various journals, a method of rendering cod-liver oil palatable, must have made a small fortune in postage stamps, to judge from the number of times his advertisement made its appearance. We have been favoured by an eminent French pharmacist with a specimen of cod-liver oil pills, in which the chemical and curative principles of this medicine are contained in a concentrated form. They have the appearance of a small chocolate *bon-bon*, and, being tasteless and inodorous, may be kept in the mouth before swallowing without any unpleasant result. We are at present unauthorised to state the exact composition of these pills, and must confine ourselves to mentioning, that from the chemical analyses and medical experiments to which they have been submitted, their efficacy has been fully proved. The inventor deserves the gratitude of all who are condemned to take this disagreeable, but precious remedy. The manufacture of the extract has proved quite successful in France, and will be immediately commenced in this country. The invention is, of course, patented. (*The Chemist and Druggist.*)

Dr. Radcliffe. Queen Anne was all her life in hot water with her doctors, as she was all her life a victim of those illnesses which arise from habitual excess in liquor. Radcliffe, her physician, on one occasion refused to leave a drinking bout in which he was engaged at a tavern, to come to her, though he was twice summoned; he lost his situation, however, in consequence. Radcliffe said when young he could find twenty remedies for every disease; but when older, he could find twenty diseases for every remedy. His practice, however, must have been what is termed in professional slang "active"; for his apothecary, Daudridge, realised £50,000, in those days equivalent to thrice that sum at present; Radcliffe, who was a miser as well as a drunkard, died enormously rich, and bequeathed the great bulk of his property to the University of Oxford to found the library which bears his name. Radcliffe, however, was the reverse of learned, even in his own profession; and it was wittily said of this bequest that it was as though an eunuch had left all his wealth to found a seraglio. It is a curious instance of the inconsistency of the human mind that Radcliffe, who was all through his active life a misogynist, or woman hater, became, at the age of 78, so infatuated with a young woman of light character that he went to Paris and learned to dance, for the purpose of humouring her whims, or, more strictly speaking, to obtain for himself permission to comb out her hair—his favourite pleasure. A curious instance of Radcliffe's rudeness is furnished in the account of his interview with Tyson, the miser; it is, in fact, a pregnant illustration of the figure of "Satan reproving Sin." Tyson being near his last hour, magnanimously resolved to pay two of his three million guineas to Radcliffe to learn if anything could be done for his malady. The miserable old man came up with his wife from Hackney and tottered into the consulting room in Bloomsbury-square, with two guineas in his hand. "You may go, sir," exclaimed Radcliffe to the astonished wretch, who trusted he was unknown, "you may go home and die, and be damned, without a speedy repentance: for both the grave and the devil are ready for Tyson of Hackney, who has grown rich out of the spoils of the public and the tears of orphans and widows. You'll be a dead man, sir, in ten days." Mead, Radcliffe's successor, was, however, the exact reverse. He was always courteous, if not always considerate; indeed, he was almost, if not wholly, a mere parasite; for when Queen Anne asked him what was the time, his reply was, "Whatever may please your majesty."

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.
Friday. ...... Westminster Ophthalmic, 1·30 p.m.
Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 8·30 p.m.: Dr. B. W. Richardson, Lettsomian Lecture.
Tuesday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Statistical.—Pathological, 8 p.m.
Wednesday. Royal College of Physicians, 4 p.m.: Dr. Brown-Séquard, Gulstonian Lecture.—Society of Arts —Geological.
Thursday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Antiquarian.—Linnæan, 8 p.m.—Chemical, 8 p.m.—Harveian, 8 p.m.—Royal, 8.30 p.m.
Friday. Royal College of Physicians, 4 p.m.: Dr. Brown-Sequard, Gulstonian Lecture.—Royal Institution.
Saturday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Asiatic.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—February 9th, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week....................	Boys ..1067 Girls.. 999	2066	1459
Average of corresponding weeks 1851-60		1774	1060

Barometer:
Highest (Sun.) 30.253; lowest (Wed.) 29.263; mean 29.593.
Thermometer:
Highest in sun—extremes (Mon.) 87 degrees; (Sat.) 48 degrees.
In shade—highest (Thurs.) 50.6 degrees; lowest (Sun.) 32.5 degs.
Mean—42.9 degrees; difference from mean of 43 yrs.+4.3 degs.
Range—during week, 18.1 degrees; mean daily, 8.6 degrees.
Mean humidity of air (*saturation*=100) 91.
Mean direction of wind, S.W.—Rain in inches, 0.9.

TO CORRESPONDENTS.

⁂ *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

A. P.—If our correspondent will read the letter he refers to, he will find that the subject there discussed is a purely personal—a *tu quoque* argumentation. Our columns are at all times freely open to a fair and *useful* discussion of both sides of the different questions which it is the business of a medical journal to deal with; and certainly amongst other questions we would, if required, give with pleasure all that the admirers of the Special Hospital system can say in behalf of their system. But, for the life of us, we cannot see how any question is to be helped to a solution by an introduction into it of personal grievances. We particularly wish to avoid the unpleasant and worse than useless operation of detailing and retailing in our pages criminations and recriminations, replications and rejoinders. Such kind of literary food (with a spice of scandal in it) may suit some stomachs; but we have no taste for it, and don't think that it tends to nourish and invigorate the body medical.

Inflammation and Blisters.—In an article on Counterirritation, in the *Dictionary of Medicine*, "Pathologist" will find a case recorded, in which, after death, a patch of lung was found inflamed to some depth from the surface, its superficies corresponding with a blister to the skin. In a paper read before a Branch meeting of the Association, and published in the Journal, July 24th, 1858, I stated that I had gained information from three distinct sources, all personal friends, that the application of a blister to the side or to the abdomen generally produced an inflammatory state in a corresponding part of the pleura and peritoneum. My first authority declined to let me give his name; but I may say that he ranks very high as a surgeon. His experiments were made on dogs and rabbits many years ago, with the special intention of ascertaining whether blisters were appropriate remedies for pleurisy, etc. Pereira mentions similar experiments and similar results. Dr. Nottingham was my second authority; and he has by a second series of experiments confirmed the results obtained by the first. Dr. Cameron was the third who gave me information on this point; he told me he had seen vascularity of the pleura in corpses, corresponding in size with blisters applied shortly before death. He had found "friction-sound" twenty-four hours after a blister to the side, none being heard before. "Pathologist" will find a great deal upon this subject in the twentieth chapter of my last work (*Foundation for a New Theory, etc.*). Thomas Inman, M.D.

February 2nd, 1861.

Social Gatherings of the Branches.—A correspondent calls our attention to the Social Gathering of Associates at Shrewsbury. We quite agree with him that such a meeting is well worthy of repetition in other Branches. Speaking of the conversazione, he says:—"This is a new feature in the Branches, and, I believe, will accomplish much good, as tending to break down the barriers between the profession and the public, and to show to the latter that we are not mere cases of instruments and bottles of physic, but can afford pleasure and amusement to others as well as relief."

T. A.—A correspondent asks:—"Having lately settled in this part, I find that the Union appointments are held by two gentlemen who hold only the Hall qualifications. Can I, as one fully qualified according to the regulations of the Poor-law Board, take any steps to have myself placed in the position of medical officer, which is one of the privileges of membership of the College?"

[As the Poor-law authorities elected Licentiates of the Hall to do their work, we should suppose that they have the power of retaining them in their offices. Under any circumstances, we think our correspondent would show very bad taste if he attempted their removal for the sake of obtaining their posts.—Editor.]

S. D.—In answer to a correspondent, who asks for information concerning the regulations under which the science certificates of the Science and Art Department of Government are granted, we beg to state that his inquiries will meet with every attention by applying to the Secretary, Science and Art Department, South Kensington Museum, Cromwell-road, London. A directory is published containing the minutes of Council; also syllabuses of the courses of study, and the examination papers. Our correspondent observes:—"I fully agree with you as to the desirability of members of the medical profession proffering themselves as instructors of the public on such branches of knowledge as physiology, chemistry, etc., and as to the urgent need of some sound (if limited) knowledge being imparted to the masses on these points."

Duties of Medical Officers of Public Charities.—A. F. writes:—"Will you be good enough to give me an opinion in the the following case:—I am a surgeon to a medical charity. When a pauper applies to be attended by the officer of the charity rather than by the Poor-law officer, is it a usual or necessary part of professional etiquette to obtain the sanction of the latter previously to seeing and prescribing for such patient?"

[The duty of the medical officers of medical charities is to see the patients who attend the charity. It is no part of their duty to make any inquiries as to the antecedents of those patients—excepting only so far as is required to show that they are proper objects of the charity.—Editor.]

S. P.—The death of the celebrated anatomist and physiologist, Tiedemann, took place at Munich on the 21st January last. He died in his 80th year.

Mr. Spender.—We are obliged by the suggestions of our correspondent. They shall receive immediate attention.

BRITISH MEDICAL ASSOCIATION.

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members of the Association, shall be admitted a member at any time by the Committee of Council, or by the Council of any branch. The subscription is One Guinea annually, due on January 1st; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year.

Gentlemen wishing to join the Association are recommended to communicate with the General Secretary, Dr. Williams, Worcester; or with either of the following officers of the District Branches: *Bath and Bristol Branch—President*, John Soden, Esq., Bath: *Hon. Secs.*, R. S. Fowler, Esq., Bath; H. Ormerod, Esq., Bristol: *Birmingham and Midland Counties—Pres.*, E. Moore, Esq., Halesowen: *Hon. Sec.*, O. Pemberton, Esq., Birmingham: *Cambridge and Huntingdon—Pres.*, Dr. G. E. Paget, Cambridge; *Hon. Sec.*, Dr. Humphry, F.R.S., Cambridge: *East Anglian* (Norfolk, Suffolk, and Essex)—*Pres.*, R. Faircloth, Esq., Newmarket; *Hon. Secs.*, Dr. Chevallier, Ipswich; Dr. Pitt, Norwich: *East York and North Lincoln—Pres.*, W. H. Eddie, Esq., Barton-on-Humber; *Hon. Sec.*, Dr. H. Munroe, Hull: *Lancashire and Cheshire—Pres.*, Dr. M. A. Eason Wilkinson, Manchester; *Hon. Secs.*, Dr. A. T. H. Waters, Hope Street, Liverpool; J. M. Robinson, Esq., Bolton; J. Sharp, Esq., Warrington; Dr. J. Thorburn, Manchester: *Metropolitan Counties—Pres.*, J. Birkett, Esq., 59, Green Street, Grosvenor Square; *Hon. Secs.*, Dr. A. P. Stewart, 74, Grosvenor Street; Dr. A. Henry, 15, George Street, Portman Square: *Midland—Pres.*, G. E. Stanger, Esq., Nottingham; *Hon. Secs.*, Dr. Goode, Derby; H. Lankester, Esq., Leicester; Dr. Mitchinson, Lincoln; Joseph White, Esq., Nottingham: *North Wales—Pres.*, Dr. Turnour, Denbigh; *Hon. Sec.*, D. K. Jones, Esq., Beaumaris: *Reading—Pres.*, Dr. Woodhouse, Reading; *Hon. Sec.*, G. May, jun., Esq., Reading: *Shropshire (Ethical)—Pres.*, H. Fenton, Esq., Shrewsbury; *Hon. Sec.*, Dr. Styrap, Shrewsbury: *Shropshire (Scientific)—Pres.*, Dr. H. Johnson, Shrewsbury; *Hon. Sec.*, S. Wood, Esq., Shrewsbury: *South-Eastern* (Kent, Surrey, and Sussex)—*Pres.*, F. Fry, Esq., Maidstone; *Hon. Sec.*, P. Martin, Esq., Reigate; *Hon. Sec. Rochester, etc., district*, Dr. Dulvey, Brompton, Chatham: *South-Midland* (Beds, Northamp-ton, and Bucks)—*Pres.*, Dr. Barker, Bedford; *Hon. Secs.*, Dr. Bryan, Northampton; R. C. Hurst, Esq., Bedford: *South-Western* (Devon and Cornwall)—*Pres.*, Dr. Hall, Torquay; *Hon. Sec.*, C. H. Roper, Esq., Exeter: *Hon. Secs., Cornwall district*, Dr. Littleton, Saltash, Plymouth; R. Q. Couch, Esq., Penzance: *West Somerset—Pres.*, John Prankerd, Esq., Langport; *Hon. Sec.*, Dr. W. E. Gillett, Taunton: *Yorkshire—Pres.*, W. Favell, Esq., Sheffield; *Hon. Sec.*, G. Hornby, Esq., York.

COMMUNICATIONS have been received from:—Dr. Hoskins; Mr. Gardner; Dr. Thorburn; Professor Bennett: Dr. A. T. H. Waters; Mr. Dayman; Dr. Hare; Mr. Paget; Mr. Reid; Dr. Nelson; Dr. Roberts; Dr. Wollaston; Mr. Wood; Dr. Hall Davis; Mr. Gamgee; Dr. Priestley; Dr. Browning; and Mr. F. Theed.

BOOKS RECEIVED.

1. Sore-Throat: its Nature, Varieties, and Treatment. By M. P. James, M.D. London: Churchill. 1861.
2. Twenty-Third Annual Report of the Suffolk Lunatic Asylum. 1861.

ADVERTISEMENTS.

Williams & Son's Pure Glycerine SOAP, analysed by Dr. Hofmann, F.R.S., and Professor Redwood, Ph.D., strongly recommended by many eminent Members of the Medical Profession, and favourably noticed by the following Medical Journals.
The *British Medical Journal.*
The *Lancet.*
The *Medical Times and Gazette.*
The *Medical Circular.*
The *Edinburgh Medical Journal.*
The *Dublin Hospital Gazette.*
It is suited to all cases of delicate skin (whether arising from disease or otherwise), and is admirably adapted for nursery use. May be had of all respectable Chemists, Perfumers, etc.
Soap Works, Clerkenwell, London, E.C.

Aërated Lithia Water.—Messrs. BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original Manufacturers under Dr. Garrod's instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain two grains and five grains in each bottle, either by itself or combined with BICARBONATE of POTASH or PHOSPHATE of AMMONIA.—Also, Potash, Citrate of Potash, Soda, Seltzer, Vichy, and Mineral Acid Waters, as usual.
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PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c., &c., contained in "*The Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to make a good many clinical experiments, which "have enabled me to verify the reports which I had heard of the efficacy of JAMES'S POWDER, in ſometimes "removing the APOPLECTIC DIATHESIS in perſons advanced in life. It is, moreover, worthy of obſervation, that "JAMES'S POWDER has been of remarkable utility in certain inſtances of DETERMINATION OF BLOOD TO THE "HEAD, which occurred at an early period of life, and threatened to end by effuſion. Laſtly, in two caſes of "GENERAL PLETHORA, in which, however, the head was more affected than any other part, JAMES'S POWDER "was exhibited by me with perfect ſucceſs."

Also *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S POWDER, in cases of undue determination of "blood to the head, is that which I have generally purſued. The patient is made to begin with a very moderate "doſe, not more than two grains at bedtime, and to increaſe the doſe by half-a-grain every night, until ſome ſenſible "effect is produced upon the ſtomach, bowels, or ſkin. Should the ſtomach be affected with ſickneſs, the doſe "muſt be leſſened by one grain on the following night. *By the addition of a little rhubarb to it a larger quantity "of JAMES'S POWDER may be adminiſtered than the ſtomach could otherwiſe bear.* If the ſkin is ſoftened, or "the bowels affected, the doſe ſhould not further be increaſed, but it muſt be repeated every night for a conſiderable "length of time: in ſeveral inſtances I have known eighteen or twenty grains taken for a conſiderable period without "any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumleian Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays (the *Lancet*, *June* 16, 1860, p. 590), as follows:—

"If the febrile excitement be ſuch as to require antimonial preparations, a pill containing 2 or 3 grains of "James's Powder (prepared by Newbery) ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

"I wish that your preparation was always uſed."

To ſecure the diſpenſing of the *original* preparation, which, for 114 years, has been ſold by the houſe of Newbery and Sons, in St. Paul's Churchyard, it is neceſſary to preſcribe it as "PULVIS JACOBI VER., NEWBERY'S," otherwiſe another article (wanting in the beſt properties, and recommended to be given in a different code of doſe, *though called by the ſame name*) may be ſubſtituted for the original medicine.

This ſubſtitution muſt bring diſappointment, and of conrſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

FRANCIS NEWBERY AND SONS.
45, *St. Paul's Churchyard, London.*

Prices for Diſpenſing quarter oz. Bottle, 3s. 4d.; 1 oz. 9s. Uſual Diſcount to the Profeſſion.

Lichen Islandicus; or, Iceland Moss Cocoa; manufactured by DUNN & HEWETT, London.

Strongly recommended by the Faculty in all cases of Debility, Indigestion, Consumption, and all Pulmonary and Chest Diseases

The two articles here combined are well known for their nutritive qualities. The Moss contains a large portion of nitrogen, or flesh-producing substance: and being prepared by a very careful and peculiar process, which frees it from all the grittiness and disagreeable flavour which are always so unpleasant, is rendered perfectly pure, with nothing but the beneficial parts left.

The Cocoa, containing more nutriment than most articles of food, being combined with the Moss, forms in this mixture an article of the greatest importance to the Invalid, and at the same time beneficial to the healthy and robust, restoring health where it is declining, and retaining it where already enjoyed.

Testimonial from A. H. HASSALL, Esq., M.D.

"I have carefully examined, both microscopically and chemically, the preparation of Iceland Moss and Cocoa made by Messrs. DUNN and HEWETT; I find it to be carefully manufactured with ingredients of the first quality.

"The combination of Iceland Moss and Cocoa forms a valuable article of diet, suited equally for the robust and for invalids, especially those whose digestion is impaired. It is very nutritious, of easy digestibility, and it possesses, moreover, tonic properties." (Signed) A. H. HASSALL, M.D.

Two Lectures

INTRODUCTORY TO THE CLINICAL COURSE ON

THE DISEASES OF WOMEN AND CHILDREN.

DELIVERED AT THE MIDDLESEX HOSPITAL.

BY

WILLIAM O. PRIESTLEY, M.D.,

PHYSICIAN-ACCOUCHEUR TO THE HOSPITAL, AND LECTURER ON MIDWIFERY IN THE COLLEGE.

Lecture II (*concluded from p.* 163).

The *diagnosis* of diseases peculiar to women is beset by various difficulties; and some of these are of so special and singular a character that only by the exercise of considerable tact, and the acquisition of that knowledge which experience alone teaches, can they be successfully overcome. Some suggestions indicating the nature of these difficulties may, nevertheless, be useful to you.

1. The medical attendant is frequently embarrassed or misled in his endeavour to form an opinion concerning the real condition of a female patient, by being able to obtain only an imperfect history of the case and of the symptoms actually present. That natural reserve which is very properly regarded as the grace of modest women, very often leads female patients to suppress information which it is very necessary for the medical man to possess. It can scarcely excite wonder that unmarried women should be indisposed to speak of inconveniences arising out of derangements in the sexual organs; but the repugnance to speak on any such matters is sometimes equally strong in the married woman or matron. It is repeatedly found by those who pay much attention to female diseases, that in the enumeration of symptoms by the patient some of the most important are passed over until elicited by careful cross-examination. Often, from an indisposition to confide her secret to a medical man, a patient will submit to great inconvenience or pain for a prolonged period, and sometimes, indeed, will allow disease to progress well nigh to a fatal termination without making a complaint.

I saw a patient some time ago who had been suffering for years with dragging pain at the loins and great inconvenience in walking, caused by the presence of a large pediculated tumour attached to the labia pudendi. The tumour was perfectly benign in character, and, when discovered, was removed at once by a slight operation. And yet for years this patient had studiously abstained from mentioning the presence of the tumour, and had had various prescriptions for pain in the back and other symptoms produced by it. A second patient, affected with a tumour growing from the cervix uteri, which was large enough to project beyond the external parts, allowed herself to be treated for leucorrhœa for a considerable period by a medical practitioner, and subsequently married, without confessing the true cause of her symptoms; and was only induced to speak at last on the subject to her medical man by her husband threatening to leave her.

An old and intelligent practitioner, who had an extensive practice in Lincolnshire, but is lately deceased, once told me of a curious illustration of this reticence in a female patient, which proved a severe lesson to him when commencing practice. He attended a young lady apparently suffering from a severe inflammation of the bowels or peritoneum, and who eventually died. Only when his patient was in a dying condition did she confess to the presence of a tumour in the groin, which proved to be a strangulated hernia. Had the medical man known about this earlier, it might probably have admitted of such treatment as would have prevented the fatal issue.

But, even in those cases where a full and complete history has been elicited, so far as the symptoms are concerned, the medical attendant is often placed at great disadvantage in forming an opinion as to the exact nature of the ailment, because—

2. Of the great objections which female patients commonly have to submit to a necessary physical examination. You need scarcely to be informed that the mere history of functional derangement in any organ of the body gives no sufficient clue to the precise nature of the physical changes which are being produced in that organ. A patient suffering from pruritus vulvæ, for example, may have this symptom developed as the result of a constitutional affection connected perhaps with some particular diathesis; but this form of irritation is occasionally associated with some of the graver forms of uterine disease, of which, as yet, perhaps it is the only urgent symptom. A patient affected in this way was prescribed for repeatedly, without submitting to an examination, the necessity of which was represented to her; and, when the examination was at last permitted, she was found to have the mons veneris and labia majora infested with pediculi, which had given rise to the intolerable itching complained of.

The term leucorrhœa, by which is meant an unusual discharge of mucous or muco-purulent fluid from the vagina, is frequently employed as though it were itself a disease; but in reality it is only a symptom of some morbid affection existing in the generative organs. It may result merely from unusual relaxation of the vagina, and a too copious secretion of the ordinary mucus lubricating the passages; but it also attends, and indeed is commonly one of the most prominent symptoms in, ulceration of the cervix uteri, whether benign or malignant in character; inflammation of the uterine cavity, or uterine catarrh; pelvic abscess or fistula opening into the vagina; and cases of cauliflower excrescence of the cervix uteri.

Menorrhagia, again, or a too copious menstrual flow, may arise from any cause by which the ovaries or uterus become abnormally congested; and in these cases, probably, very little change can be detected in the organs by examination. But menorrhagia is also one of the most prominent symptoms which attend uterine polypi and fibrous tumours; and it is often the very first indication of serious disease in cases where carcinoma uteri is already far advanced.

3. From the numerous sympathetic derangements which complicate the diseases of women, and those of the reproductive organs in particular, the attention of the medical attendant is apt to be diverted away from the true seat of the malady, and fixed on some point of less importance. The pain experienced in the knee by those afflicted with hip-joint

disease, and the pain in the testicle which often accompanies disease of the kidney, are examples of sympathetic derangement met with in general practice. Commonly associated with diseases of the uterus and its appendages, are instances of the same kind not less remarkable. The pain attending disease in the ovary or uterus may be experienced principally in the mammary glands. Dr. Simpson tells us that he was once consulted by a lady who suffered from pain in the mammæ, and had been assiduously treated by various local and general remedies, in the hope of relieving it. She was subsequently found to have a slow corroding carcinoma of the uterus, upon which the mammary pain depended, and which, at the time of examination, had destroyed almost the whole tissue of the cervix. Pain referred to the lumbar or sacral regions in the back is very often produced by some morbid lesion in the pelvis; and sympathetic vomiting, palpitation of the heart, and various forms of neuralgia, may have the same origin. Pain over a small extent of surface just below the left breast, and known as inframammary pain, is nearly as frequent in connexion with uterine disease as pain in the shoulder is in connexion with hepatic derangement.

4. From certain peculiarities in the constitution of women more immediately connected with the nervous system, severe diseases are so closely simulated that it is often very difficult to distinguish between the spurious and the real. You may be called to see a young female patient who has to all appearance an acute and dangerous attack of peritonitis. There may be exquisite tenderness to pressure, a certain amount of swelling, and other indications of this serious affection, and yet the attack may be one of an essentially hysterical character. In these cases, the pulse is not likely to have that rapidity and force which you might expect if inflammation were present; and if you can divert the attention of your patient for a moment from the tender abdomen, she bears, in all probability, pressure without flinching. Hip-joint disease may be simulated just in the same way, and the counterfeit affection may be detected in a similar manner.

Perhaps the most curious of all the imitative diseases are those conditions named respectively hysteric tympanitis and spurious pregnancy. These affections have often been mistaken for ovarian or uterine tumours or for genuine pregnancy. The abdomen is projected forward, as if it contained a solid tumour or gravid uterus; and if there is much fat in the subcutaneous tissue, the muscles of the abdomen, being unusually tense, yield a sensation to the hand very similar to that experienced when a solid mass is really present. In cases of this kind, the abdomen has in fact been tapped, and on several occasions been laid open by incision, for the purpose of excising an ovarian tumour, when none was present. The use of percussion ought, of course, in these cases, to do much in clearing up doubts concerning the nature of the abdominal swelling; but more conclusive still is the evidence afforded when we administer chloroform to the patient. If the case be one of hysteric tympanitis or spurious pregnancy, uncomplicated with solid tumour, the swelling entirely disappears when deep anæsthesia is induced, but it reappears as consciousness returns.

5. The diagnosis of disease in women is further complicated by the fact that a large proportion of them are attended by no appreciable change of structure in the part affected. When children are ill, their complaints are chiefly corporeal, and a sort of general ratio may be observed between the development of symptoms and organic lesion in some part or organ of the body; but in women we find a large class of morbid affections, many of them very painful and even alarming in character, which, in the present state of our knowledge, cannot be associated with any alteration in the part implicated. The irritable uterus described by Dr. Gooch is a painful affection of the womb, attended by no increase of heat or in the size of the organ, and no appreciable deviation from the physical characters it presents in health can be detected.

Some of the forms of neuralgia are, no doubt, produced by sympathy with derangement in some distant organ; others, again, admit no such explanation; and no organic disease can be detected at the seat of pain. A peculiar group of symptoms in females, which, for want of a better explanation, are said to arise from "spinal irritation", may be enumerated in the same category. A patient suffering from this affection complains of severe pain in the back, and perhaps also in other parts of the body. An inability or unwillingness to walk creeps on; and the lower limbs, for want of use, gradually waste. No organic disease is usually found to account for these symptoms; and the most careful examination after death fails to detect any change in the spinal cord or elsewhere. It would be wrong, nevertheless, in these cases, to suppose that the sensations experienced by the patient are fanciful or imaginary. Her pain is probably none the less real because a medical man cannot find an organic cause for it; and, although much good may be done by encouragement, none will result from harsher treatment.

6. But lastly—the physician in investigating the diseases of women has constantly to be upon his guard lest deception and imposition be practised upon him. This is a difficulty in diagnosis altogether peculiar of its kind, which belongs specially to the pathology of females. In studying infantile pathology, the practitioner may be at fault from an inability to comprehend that language of signs by which alone the indications of disease are manifested in young children; but that language is at least truthful, if rightly comprehended. In women the case is sometimes widely different; for, instead of using the gift of speech the better to direct the physician in his medical inquiries, they will employ it sedulously for the purpose of deceiving him. I by no means wish to be understood as impugning the veracity of women generally; but cases of wilful deception in female patients are so commonly met with, that I am anxious to put you on your guard against them. I do not now allude to those instances in which a woman has an obvious motive for deception, as in the persistent denial of pregnancy by the unmarried, in face of the strongest evidence of its existence; nor do I allude to those cases in which a poor female patient is so possessed by an illusion concerning her bodily health, that she endeavours to impress upon the medical attendant a belief firmly rooted in her own mind. The instances to which I allude are even more singular, and apparently altogether purposeless. I saw, with Dr. Dobell, not long ago, a patient, who, besides marked hysterical symptoms, had a moveable tumour in the right lumbar region, which we be-

lieved to be a so called "floating kidney." She dwelt with a morbid tenacity on her various symptoms, and had an apparent gratification in stating that the several remedies prescribed for her, were followed by no improvement. Her attention having been specially fixed on some derangement of the urinary organs, by the discovery of the moveable kidney, she brought one day to Dr. Dobell a number of small angular bodies, which she affirmed were calculi passed from her bladder. These calculi turned out on careful examination to be small flint pebbles.

Some months ago, I saw a middle aged lady from the country, who had, according to her own account, been suffering from menorrhagia for a prolonged period. I could find no organic disease sufficient to account for the hæmorrhage, and the same report was given by other physicians, who had been consulted on the case. Some weeks after she left London, her family medical attendant sent me a packet containing a piece of fibrous looking substance which the lady had given to him, with the intimation that it had escaped from the vagina at the menstrual period, and that she had frequently passed masses of a like character. On examination with the microscope it proved to be muscular fibre of meat, in which the transverse striæ were uncommonly distinct, and it had probably been cooked, as the fibrillæ were separated with unusual facility.

In a third case, which occurred some years ago, during my connection with St. George's and St. James's Dispensary, a young unmarried woman brought the testicle of some domestic animal, with the assertion that it had come from her womb; and, by way of removing the doubts I expressed as to the accuracy of her statement, brought me the fellow testicle at my next sitting.

The late Dr. Richard Mackenzie of Edinburgh, had a lady patient who was in the habit of thrusting needles into her foot, and then submitting to a surgical operation for their removal; I believe no fewer than ten needles were cut out in this way from one foot, and then a remark having caught the patient's ear as to the singularity of their always being in the same foot, the next needle appeared in the opposite limb.

Professor Bennett, of Edinburgh, had under his care a woman who brought him pieces of fresh animal bladder, as having been passed by herself. She was found to have procured them from the shambles for the purpose of deceiving him.

But the most curious and incomprehensible of all, is the history of a patient kindly communicated to me by Mr. Page, of Carlisle, in the following words—

"A young woman applied at the Infirmary, with a very unhealthy looking ulcer at the upper part of the sternum; it appeared to resist all treatment, and spread with such extreme rapidity, that it seemed to me she must be doing something to increase it. I therefore had it covered in such a way that she could not get at it, and under the most simple treatment it speedily healed. A year or more after, she again applied at the Infirmary. She said she had a gathering at the end of her finger. There was a sinus leading to the bone, which I found was dead, and I proposed its removal. To this she would not consent, and she ceased her attendance. I found that she afterwards went to Liverpool, where partial amputation of the finger was performed; but, the wound not healing, she was admitted into the Infirmary and amputation of the forearm was performed, I believe by the late Mr. Bickersteth, the wound having then extended to the hand, and assumed much of a malignant aspect. For a time all went on well, but at length the same appearances presented themselves in the stump, and amputation of the arm above the elbow was resorted to. She at length left the Infirmary at Liverpool, the stump being healed or nearly so, and returned to Carlisle. Here the same appearances of disease were again developed, and she was admitted into the workhouse, and amputation at the shoulder-joint was performed. The wound I believe healed, and she went home, but shortly she complained of ulceration of the stump, and she applied to me at the Infirmary again. The cicatrix at the shoulder was now the seat of a most foul and extensive sore, and she said she was sure there was disease of the shoulder blade. I ordered her a chloride of zinc lotion, and told her to come on the following day. She did so, and at once producing a small parcel she said I was mistaken in supposing there was no disease of the bone, for that while she was washing the wound last night, two pieces came away, and she presented me with two large clean pieces, apparently cut through the shaft of a leg of mutton. Without telling her that I did not believe her, I desired her to come into the Infirmary on the following day that she might be better attended to. She came as desired,—the ulcerated cushion of stump having in it a transverse wound fully three inches in length, and not less than an inch deep, which had evidently been inflicted with some blunt instrument; she said she found it the night before after she went to bed. I ordered her to bed and had her arm bound to her body; in three weeks the shoulder was perfectly healed. A few days after her arm was released, I was visiting the ward at night. As I passed her bed I observed that her left eye was swollen. I inquired the cause, when she said she thought she must have got some dust off the wall in it, but that it was not painful. On everting the eyelid I found a piece of lime plaster more than the eighth of an inch in diameter carefully secreted. From that time she lived a life of the extremest poverty. She attended after at the Infirmary on account of menorrhagia, which was always looked upon with suspicion, and about two years ago she died of phthisis, never having admitted her deceptions to any one. The motives which induced this unfortunate creature so to subject herself to torture, are certainly not to be divined. It was not for the sake of sympathy; for she had none. She lived in a wretched home with her father and a sister, who suspected her of malingering, and who, when she had the wounds, often made her sleep in an outhouse, as the odour was unbearable."

Examples of this description are indeed comparatively numerous, and you may very naturally ask, what is the explanation of them? A satisfactory answer in the present state of our knowledge is, I fear, not readily forthcoming. In some cases, no doubt, the tendency to deceive arises out of a morbid craving for sympathy. A patient suffers; her medical man fails to discover any adequate cause for her illness; and to enlist his interest, she is induced first to exaggerate and then to deceive. But there are cases for which this explanation is not sufficient, and which are only explicable by supposing the presence of some mental disease. In nearly all the instances of this kind we are able to trace some disorder or derangement connected with the organs of reproduction, and it is on this account that they are classed among the phenomena which are termed hysterical. With a full knowledge of the facts I have enumerated, and called upon constantly to encounter them, it can scarcely be wondered at, that medical men are habitually cautious in receiving evidence from females, and are more incredulous than others of any unusual or marvellous phenomenon exhibited by women, and particularly by young woman; more especially if any indications are present of impaired bodily health, such as I have alluded to. With the exercise of all possible skill and care, they occasionally find great difficulty in solving some of the complex problems of disease presented by this class of patients, and are sometimes constrained to admit that success in treatment has rather been in proportion to an effect produced on the mind, than the physical effect of remedies prescribed.

In conclusion, I trust that in indicating some of the difficulties you have to encounter in studying the diseases of women, I have not discouraged you. You will have gathered from what has been said, that minute observation, painstaking, and cautious investigation, tact and delicacy of feeling, are indispensable to successful practice in this department; but, with the exercise of these, the difficulties are for the most part surmountable.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

ST. MARY'S HOSPITAL.

A CASE OF PERSISTENT EPISTAXIS.

Under the care of E. H. Sieveking, M.D.

The following case presents several features of interest, in relation to the origin, the immediate source, and the treatment of the hæmorrhage.

J. S., aged 37, a married man, and at the first application for relief a toll-collector, subsequently a messenger, tall, well built, but anæmiated, came under Dr. Sieveking's care, March 14, 1856, on account of epistaxis, to which he had been subject for about a year. The hæmorrhage had notably increased in frequency and amount for the preceding two or three weeks. The previous history was to the effect that, when about eight years old, he had ague; when 22, small-pox; and when 31, low fever. Besides that, he was nearly blind in the left eye from an injury received when about 20 years of age. The hereditary influences were much against him, since his mother, brother, and two sisters have died phthisical. He never saw any blue (purpuric) spots on his body; there was no trace of pulmonary or of cardiac disease, nor was there any enlargement of the spleen. The patient had been subject to sick headache. The hæmorrhage had occurred daily for the last six days, at the time of application. He had two days previously felt a snapping in the left side of the head; the largest epistaxis had lasted an hour. He complained of great weakness, which he attributed to the hæmorrhage; he was afraid to blow his nose, because it immediately brought on the epistaxis. The bowels were costive; the pulse 100, full. The hæmorrhage appeared to come from the left nostril only, the lining membrane of which was red from intense congestion, while the opposite side was normal. There was no appearance of polypus, and he could breathe freely through both nostrils. The patient attributed the hæmorrhage to cold, caught in his occupation as toll-collector on Hungerford Bridge, in which capacity he was exposed to a constant draught impinging upon the left side of the body: there were, however, no signs of catarrhal or rheumatic affection. During the visit hæmorrhage came on, which was immediately arrested by adopting the plan recommended by Négrier many years ago, of elevating the arms above the head. He was ordered to snuff up the liquor aluminis, and to take every morning an ounce and a half of white mixture (sulphate and carbonate of magnesia). March 18th. The report is, less epistaxis; the last occurred yesterday morning. The white mixture was repeated; and he was ordered to have an ounce of quina mixture, with half a drachm of dilute sulphuric acid, three times a day. March 25th. He twice had short attacks of epistaxis since last visit; has had a good dinner every day. There were three slight attacks up to the 1st April, when he ceased attending; the treatment being continued as above. He remained free from epistaxis for six weeks. On the 10th May it returned, and occurred on four consecutive days, rendering him very nervous, the immediate cause on this occasion being an annoyance by a set of drunken men. The bowels were costive; there was much pain on the upper part of the left parietal bone; the pulse 80, and strong. The acid quinine mixture and laxatives were resumed; and counterirritation to the neck, followed by an issue on the arm with mezereon bark, were adopted with marked benefit. The hæmorrhage was always at once controlled by the remedies, but sooner or later it recurred when they were omitted. A new symptom now (May 20th 1856) supervened in the shape of severe pain at the epigastrium before the commencement of the epistaxis. Gallic and tannic acids and krameria were employed; but a steady perseverance in the internal use of quinine, and the external application of the liquor aluminis compositus, seemed to promise most success. On the 27th June, there had been no hæmorrhage for thirteen days, and the patient reported himself much stronger, July 18th. No hæmorrhage for thirty days, till four days ago, when, while sitting still, he felt a tingling in the nose, which caused a sneeze, since which there has been slight hæmorrhage daily; he complains of a sensation of scalding or itching as if there were ice inside, confined to the left side of the head and neck. The mezereon was now applied to the left upper arm as a counterirritant, the other remedies, with compound colocynth pill, being continued. July 25th. The hæmorrhage having continued daily, and there being now gnawing pains in the region of the left kidney, two grains of acetate of lead were given three times a day in addition to the quinine. Arrest of the hæmorrhage followed these measures; and after the 19th August the patient ceased attending.

In October 1859, he again came under treatment, on account of a return of the complaint. The anæmia was very marked, and the general and local symptoms were essentially the same as on the former occasions. There was nothing abnormal in the microscopic appearances of the blood; there was no purpura, enlarged spleen, or other organic disease traceable. The application of nitrate of silver to the nostril, the administration of sulphuric acid and buchu internally, failed to arrest the hæmorrhage. The infusion of digitalis with tincture of the sesquichloride of iron was then given, together with five-grain pills of gallic acid; and it is inferred, from his ceasing to attend, that the disorder was checked. Since then he has not again presented himself.

Remarks. It is rare to meet with cases of epistaxis in which astringents and styptics do not very speedily arrest even severe hæmorrhage. In the present instance, there was no evidence of the patient possessing the unfortunate tendency to hæmorrhage from every part of the body, which is known by the term hæmophilia; nor did it appear either from the constitution of the blood that there was any disorganising process at work, which by reducing or breaking up the red corpuscles, and increasing the fluidity, enabled the blood to transude more readily at the mucous membranes or elsewhere. In the case of an elderly lady, who was subsequently under my care for a similar very troublesome affection, the irritation produced by the strange habit of taking large quantities of snuff appeared to account for a persistent epistaxis, which, after some trouble, was permanently arrested by the local application of the tincture of the sesquichloride of iron. In the man whose case I have detailed, there was no source of local irritation; in fact, there appeared to be no cause to which the affection could be attributed, but the continued exposure to cold which induced internal congestion. From the numerous deaths from phthisis in his family, it may be inferred that his mucous membranes were delicate, and that this formed a predisposing cause; the epistaxis acting in a measure vicariously for that pulmonary hæmorrhage which might otherwise have ushered in pulmonary consumption.

TAUNTON AND SOMERSET HOSPITAL.

OPERATION FOR THE RADICAL CURE OF PROLAPSUS UTERI.

By C. H. Cornish, F.R.C.S., Senior Surgeon to the Hospital.

Sarah C., aged 48, widow, was admitted into the Hospital, on September 29th, 1860, under Dr. Kelly and Mr. Cornish, suffering from heart-affection and complete prolapse of the uterus, which had existed upwards of twenty years, rendering her life miserable. When she stood, the uterus protruded between her thighs. In addition to this, she was of a most irritable temperament. Near the os uteri was a small elongated tumour, which, shortly after her admission, was removed by ligature. The catamenia had not altogether ceased.

A week after her admission, she had a bronchitic attack, which postponed the operation for a time. In consequence of the heart-affection, it was deemed prudent not to administer chloroform.

November 25th. She was ordered to have slop diet; to take a dose of castor oil, and to have an enema early the following morning.

November 26th. The patient being secured on the table as for the operation for lithotomy, an incision was made parallel with the meatus, through the skin at the edge of the labium on each side, to the inferior commissure, and continued through the lateral walls of the vagina to the depth of about an inch and a half, and extending to the posterior wall of the vagina to a similar depth; thus removing a large flap of mucous membrane on each side, as well as from the perineal boundary of the vagina. No hæmorrhage of any consequence occurred. The denuded walls of the vagina were then brought into apposition by three quilled sutures; and four interrupted sutures were applied to the edges of the cut labia; silver wire being used for both. The knees being tied together, she was removed to bed, and a catheter was introduced into the bladder. She was ordered to take a grain of opium every four hours, and two grains of opium at night.

The grain of opium three times a day was ordered to be continued on the following two days; and on the 29th, she was ordered to have two grains at night, and three ounces of port wine; on the 30th, twenty minims of liquor opii sedativus were given at night.

December 3rd. All the sutures were removed.

December 4th. Her bowels not having been acted on since the operation, a large enema was administered with good effect. She was ordered to have a chop and egg daily, with half a pint of ale; and the following mixture:

℞ Acidi nitro-muriatici ♏vij; infusi calumbæ ℥xj; tincturæ aurantii ℥i. M. Fiat haustus bis die sumendus.

She continued progressing well, and was discharged on February 9th; the union being perfect, and extending close to the meatus. She was retained in the Hospital several weeks after cure that the case might be watched, and had daily walked about the ward without inconvenience.

Original Communications.

THE STRUCTURE AND GROWTH OF TISSUES:

A SHORT ACCOUNT OF THE CONCLUSIONS DERIVED FROM SOME NEW OBSERVATIONS WITH THE HIGHEST MAGNIFYING POWERS.

By LIONEL S. BEALE, M.B., F.R.S.,
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II.—Of the Powers of Germinal Matter.

[*Continued from p.* 139.]

Of the Powers of Germinal Matter. As far as I can learn, there are no peculiar characters in germinal matter which will enable us to form the slightest conception as to its properties or powers, or to tell from what class of living beings it has been derived. The germinal matter taken from one elementary part exactly resembles in microscopical characters that existing in another, although the whole history of the after-life of the two may be widely different.

A small collection of particles taken from the growing tissues of the mammalian embryo at an early period of development, resembles exactly, in every particular that I can discover, even in its behaviour with certain reagents, a collection of particles entering into the formation of one of the so-called cells of a fungus; yet how different are the powers of these two masses of soft granular matter!

The active material of the fungus goes on increasing, dividing, and subdividing, without further change in structure or power; while, on the other hand, the active material of the mammalian embryo increases by subdivision, but its powers are different in every stage, and the structures formed from it are different. It retains its property of infinite growth; but, as it subdivides, there is an alteration in the powers of the resulting masses. The mass at first possesses the power of giving rise to germs from which bones, muscles, nerves, and all the tissues spring; but the power of each resulting series is more limited, and at last the germs have power to produce only the particular tissue which it is their office to form, and we have germs which produce bones, cuticle, muscles, nerves, etc., but those which produce bone cannot develope muscle or fibrous tissue, neither can the cuticle-germ give rise to any tissue except cuticle; nay, germs may be removed to parts of the body at a distance rom the points at which they have been developed, and they still give rise to the formation of their characteristic tissue. Bone may be made to grow in various parts of the body, and its germs have formed bone-tissue even in the lung. Yet all these germs have apparently the same origin; and we must, therefore, conclude that as successive generations of germs are formed in one individual organism of complex structure, the power of *producing* different kinds of tissue-forming germs becomes more limited, although each still retains its power of infinite multiplication if the restrictions, under which its growth is normally carried on, be removed.

As development proceeds and more perfect structures are evolved, the tissues first formed, having served a temporary purpose, are removed. In the formation of some of the tissues of the higher animals, several series of textures succeed each other in regular order. The germs of the whole series have arisen from the same mass, but the development of each successive order of germs has led to the production of structures which materially differ from one another in properties, mode of growth, and chemical composition. It might be said that the conditions necessary to the growth of the first series become changed, and the resulting textures are modified in consequence; and that every successive alteration of the conditions under which the germs grow necessarily produces a modification in the character of the changes taking place in them. It does not seem that the first series of germs dies, after having arrived at the end of the natural period of its existence, and gives place to the next set; but, before the first series have ceased to grow, they are encroached upon by the increase of those which are to take their place, and are thus *destroyed;* the vital powers of those last formed being greater than the vital powers of those which preceded them. The first set may by their growth be removed to a great distance from the nutrient material, while perhaps the development of tubes carrying nutrient matter accompanies the increase of the latter; and thus material capable of being animated is freely distributed to them. But these supposed *altered conditions* have not been brought about by the influence of accident, nor are they due to mere external agents; but they result, so to say, from the changes which have been effected by the particles which preceded those whose development we are considering; the conditions which favoured the growth of the last having been induced by a previous series, and so on from the beginning; *internal conditions* resulting from the action of a preceding race of living particles being at least as necessary to the development of a structure as the external conditions of heat, light, electricity, etc.

These external conditions appear to act very differently upon different living structures exposed to their influence under precisely the same circumstances. The different results seem to be due to the different internal powers of the living structures which they have derived from preexisting structures of the same kind. In no case does it appear that any *essential modifications* of structure or altered order of changes or action, have been induced and maintained by altered external conditions. The *tendency* of actions, due to inherent powers, to repeat themselves in the same order in endless series, seems to predominate over, and to resist, the tendency which altered external circumstances may be supposed to exert in modifying the structure of tissues and the nature of the physiological changes, which characterise every kind of living structure. The power of repetition—in fact, the life of the structure—is destroyed by the altered external conditions to which it is exposed before these have produced the modified results expected, or, if I may so say, caused the changes to diverge from the direction they were originally made to take.

[*To be continued.*]

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Continued from page* 144.]

ii. Notwithstanding the most judicious and persevering resort to such therapeutical means as have been described, it very commonly occurs that tuberculous glands remain in a state of induration and enlargement for an indefinite period, and demand more direct surgical interference, on account of the disfigurement, inconvenience, and positive danger to important structures and functions, which they cause. But the adoption of such measures as will be presently discussed depends on certain conditions, which it is all important to bear in mind; for an injudicious employment of them not only frequently leads to indifferent results, but to consequences the opposite to those which the surgeon desired.

No precise rules can, however, be laid down, by which to regulate the kind of local treatment to be followed; although there are certain features in every case falling under notice, which, if duly appreciated, will enable the practitioner to select those means which are most appropriate. An acquaintance with the history and symptoms exhibited by slow, insidious, and obstinate tuberculous disease of the lymphatic glands, situated, for instance, in the neck, at once forbids a too speedy resort to definite measures; for it commonly happens that although, for a considerable period, only one or two glands in a particular region may evidence implication of a persistent character, others in closer or more distant relation will sooner or later assume similar morbid conditions.

This is particularly the case when the patient shows a marked tendency to tubercular disease of other organs.

Too great care cannot, therefore, be exercised in recommending a plan of treatment, which, even under apparently favourable circumstances, is not always followed with the wished for success.

When it is determined to destroy or remove one, two, or a limited number of glands, one or other of the following methods may be employed; but they ought never to be practised before recourse has been had to milder means, and to those measures which are known to improve the general health.

Experience has so thoroughly convinced me of the importance of attending to this recommendation, that I rarely suggest even the consideration of any ultimate local treatment ere I have made certain that milder and more general means have, after a fair trial, proved unavailing.

a. Caustics and Actual Cauteries. The destruction of obstinate tubercular glands by means of one or other of these agencies, is a practice which has met with admirers; but I much question not only its advantages but its propriety. An indurated gland, even admitting that tubercular infiltration has led to considerable alteration of the true glandular tissue, cannot be disintegrated and destroyed by means of caustics, without involving the integrity of neighbouring parts, and occasioning an amount of inflammatory disturbance which may prove constitutionally injurious. It is also questionable whether the ultimate results of this practice be so satisfactory as some authorities assert. I have seen very serious inflammation ensue from even a most careful use of caustics, applied in the way to be first described, and have often had cause to regret that the subsequent processes of healing and cicatrisation have not been more perfect.

Several plans for the application of caustics have been suggested and followed from time to time. Some surgeons, after cauterisation of the integument covering the diseased gland, destroy the gland itself by means of strong escharotics, such as the Vienna paste, potassa fusa, nitrate of silver, etc. It need scarcely be said that such surgery is, as a rule, far from meeting with the approbation of those who make conservatism the standard of their art. The unnecessary destruction of healthy skin, the pain and nature of the injury, and the scar which remains, even if the diseased organs be effectually removed, at once discourage the adoption of a measure unworthy even of empirics. The same remarks apply with equal weight to the use of the actual cautery, as a means for destroying lymphatic ganglia thus affected.

b. Introduction of Substances into the Diseased Gland. Within the past half-century the destruction of obstinate tuberculous glands has been obtained by a process somewhat less coarse, and more effective, viz.—the introduction of certain substances into the gland itself, for the purpose of creating an amount of irritation sufficient to procure resolution, or to cause such destructive changes as lead to softening and suppuration.

Although this practice is not by any means, so far as I am aware, commonly resorted to by English practitioners, still on the Continent it has gained many supporters. Within the last few years, I have seen it pursued in some of the Parisian hospitals, in the following way:—The glandular tumour to be operated on is first pierced by a sharp thin-bladed knife, when a portion of the caustic to be employed is introduced into the cavity made for its reception. The caustics in general use are composed of various proportions of chloride of zinc, potassa fusa, nitrate of silver, etc., and made into sticks resembling those of maccaroni, by means of flour or starch with gum. In this way the caustic selected can be more conveniently applied than in its natural state. If it be desired to promote rapid softening and suppuration, several pieces of the caustic stick may be thrust into the tumour; but, as a rule, those who resort to this method incline to a less rapid destruction of the diseased organ, and from what I have seen, I believe it to be the wiser plan.

Instead of caustics of this nature, the *trochisques escharotiques de minium*, so strongly recommended by Baudelocque, may be employed. These substances are composed of red oxide of lead and bichloride of mercury moulded by means of paste into the form of ears of corn, and are used much in the same way as the caustic sticks. (*Op. cit.*)

My friend Mr. Hoffman of Margate, who has paid considerable attention to the treatment of scrofula in various forms, prefers inserting into the tumour to be destroyed a certain portion of *iodide of starch*, which rapidly exerts an effect partly discutient and partly destructive; and from the results of his experience it appears to be a proceeding worthy of adoption. My own experience is however, in favour of the *potassa fusa* when judiciously employed; for I have reason to believe that the after results are often all that can be desired. Besides these various substances, others devoid of any caustic properties, such as parched peas, etc., are sometimes introduced into diseased glands for the express purpose of inducing suppuration; and, in certain instances, the employment of them is followed with advantage.

Although the contact of strong escharotics is commonly followed by immediate destruction of the part to which they are applied, and, perhaps, by more or less direct irritation of surrounding healthy tissue, still it is astonishing to see how comparatively little excitement is generated by the introduction of a moderate amount of these caustics into obstinate glandular tumours. In one case I saw treated by a French surgeon of eminence, I anticipated, judging from the amount of caustic paste introduced into a glandular tumour situated in the neck, that the local disturbance would be extreme; but a daily acquaintance with the after-progress of the case showed what I have since corroborated in similar instances, that the dread of excessive action need not be entertained, provided requisite care be taken.

In three cases, in particular, which I some time since treated in this way, I had no cause whatever to dread the occurrence of undue disturbance in healthy parts, although the patients were not in the most favourable condition.

M. Lebert, although he has himself had no experience in this form of treatment, states that the elder M. Guersant, formerly of the Children's Hospital in Paris, found that the use of these caustics, especially of the chloride of zinc, did not produce a reaction so acute as he might have supposed. (*Op. cit.*)

The introduction into enlarged and diseased glands of small sized wires raised to a high temperature by means of fire heat, or the galvanic current, has been lately much spoken of. Having only occasionally resorted to this plan, and then merely for the sake of trying its efficiency, I am unable to offer any definite opinion regarding its positive value; but I think it not improbable that a discriminate resort to the galvanic wire will occasionally be found of service, as its application is unaccompanied with pain, and there results but slight, if any, subsequent disfigurement.*

c. The Knife. When tuberculous glands prove refractory to such means as have been described, and a resort to caustics, cauteries, etc., is deemed inexpedient, it is sometimes advisable, as a last resource, to recommend the use of the knife. But, before doing so, it is the duty of the surgeon thoroughly to acquaint himself, not only with the true condition and situation of the diseased glands, but with the constitutional diathesis and state of his patient; for, unless such knowledge be satisfactorily acquired, operative measures will not be followed with that success which might otherwise be anticipated.

The following conditions justify a resort to the knife for the removal of enlarged and obstinate tuberculous glands, ere any evidence of softening and suppuration is afforded. Firstly: When such glands are limited in number and superficially situated; when they have resisted all milder means of treatment, and their presence proves injurious to neighbouring important structures by exercising pressure on large blood-vessels and nerves, and causing impediment to the functions of deglutition and respiration. Secondly: When the presence of the diseased glands simply gives rise to deformity, and there exists no apparent impediment to their safe removal.

As was formerly observed, the lymphatic ganglia of the neck have a superficial and a deep situation; and although the glands composing each division may become involved with tubercle, the inclusion of the latter is generally accompanied with more embarrassing complications, and the treatment required is consequently more difficult, and often unsatisfactory.

It generally happens, as we have already seen, that when tuberculous disease has manifested itself in one, two, or more of the deeply seated lymphatic ganglia, and when medicinal and other means have failed, but a short time elapses ere the glands in close proximity become similarly affected. It is on this ground that a too hasty resort to the knife is injudicious and unsurgical. When, however, there exists no direct impediment to the removal of one or more diseased glands placed near large vessels and nerves, the greatest skill is necessary. I have known extensive injury done to these structures in attempting to take away a cluster of tuberculous glands; and it is by no means unusual for the surgeon to find increasing difficulties presenting, the further he proceeds with his dissection; and instances are recorded in which the number, size, and position of the glands, which had become fused into a mass, compelled an abrupt discontinuance of the operation.

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* Mr. H. Lobb, who has paid considerable attention to the treatment of various forms of chronic disease by means of galvanism, tells me that he believes considerable good is sometimes effected by its application; but that it is of most value when the glandular enlargement is dependent on simple inflammatory changes.

In a former chapter I have alluded to one such occurrence; but, fortunately, cases of this description are comparatively rare in the hands of practical surgeons. When, however, nothing short of operative measures will succeed, they must be proceeded with in the same way as is recommended for the removal of non-glandular tumours which are deeply seated, and in relation with important structures.

No matter to what size the glandular swelling may have attained, it is seldom or never necessary to take away any portion of the skin, provided it be healthy. A single straight incision through the covering integument will, should no very severe inflammatory changes have ensued, generally enable the operator satisfactorily to expose the tumour, and subsequently to free it from its connexions with adjacent parts by using the handle of the scalpel rather than its blade.

Not only should the line of incision, especially if the operation be called for in a region exposed to observation, such as the neck, be chosen with due regard to the prevention of future deformity, but the lips of the wound should be joined in such a way as to render the surgeon's handiwork difficult of detection.

When the glands involved in disease are more superficially situated, less surgical skill is required: for there is not so much danger of wounding large arterial and venous tracts and important nerves. The same tact is, however, necessary in endeavouring to obtain a cure with the least possible subsequent disfigurement.

I have frequently met with the most satisfactory results in removing tuberculous glands situated near the surface of the neck; but then I have been careful to select only those cases which appeared favourable for operation.

I cannot close these observations relating to the removal of enlarged and diseased glands situated in the neck, without again enforcing the necessity of a most careful inquiry into the local and general symptoms exhibited in every case which may be submitted to operation; for unless this be done there is every probability of failure, and the occurrence of similar disease in glands which were previously healthy.

A case illustrating these remarks is recorded in the *Medical Times and Gazette* for February 1859. A girl, about sixteen years of age, had removed, by Mr. Hilton, of Guy's Hospital, upwards of twenty glands from the left side of the neck. "The case did well; but, after the girl had left the hospital, other glands in the same side of the neck enlarged, and we saw her in another hospital about a year afterwards with a swelling nearly as large as her original one."

Although it is most commonly in diseased conditions of the cervical glands that direct surgical interference is called for, still it is sometimes expedient to take away the glands situated in the arm-pit and other parts. Only those surgeons who have undertaken the removal of the axillary glands can be fully aware of the difficulty experienced on account of the near proximity of highly important blood-vessels and nerves; with care, however, the operation may be safely accomplished. I have already quoted an instance in which I assisted to clear the axilla of tuberculous glands; and Mr. Hillman, of the Westminster Hospital, records a case in which he successfully took away all the glands of the arm-pit in a boy four years of age.

[*To be continued.*]

Transactions of Branches.

SHROPSHIRE SCIENTIFIC BRANCH.

DIPHTHERIA.

By W. Newman, M.D., Fulbeck, near Grantham.

[Read Jan. 25th, 1861.]

There seems not much doubt that diphtheria was first observed in the fen districts of Lincolnshire; some time, however, occurred before it reached this immediate neighbourhood, and, for some months after their first appearance, the cases that fell under my own notice were so mild in character that I could hardly believe them to be true diphtheria, from the absence of severe symptoms and the less duration of the whole attack.

I had soon afterwards full reason to know the true disease; and since Midsummer 1858 I have had almost a succession of cases varying in character.

In filling up a report for the committee of the Epidemiological Society, in the early part of 1859, I stated that there appeared reason to speak of two distinct forms of the disease. The *one* occurred in persons of all ages; it was marked by exudation-points, with comparatively slight redness of throat and fauces; these points of exudation not spreading, and the whole clearing off in two or three days. The *other* was marked by deep redness of fauces, thicker and more extensive exudation, first appearing in separate patches, but rapidly coalescing into one large mass; the symptoms were much more severe; and convalescence was tedious.

Further experience inclines me to the belief that these are simply allied forms of the same affection. The one will merge into the other insensibly; one member of a family shall have the severe form; two or three others only the slighter condition.

There cannot be doubt as to existence of direct contagion from one to another. More than once it has been imported into a row of houses by some relative coming from a distance; thence travelling to those families in direct intercourse with the house just affected; and so on through the village. I took the disease myself, in August of the last year, from a girl to whose throat I had applied the usual escharotic. That cases do happen without history of infection is certain, and these are most probably due to transmission of the fomites somehow or other by the atmosphere; as seen, *e.g.*, in the ordinary exanthemata. I do not know that there is anything to add to the disease as described in systematic treatises. Some minor points may, however, be touched on. There is, I think, in almost every case I have seen, a peculiar change in the voice even before the exudation or swelling of the tonsil declares itself: the sounds are husky and unnatural. There is, coincident with the first appearance of redness on the fauces, a sort of yellowish mottling usually over the central portion; and when this is to be seen, after the lapse of a very short time there is the characteristic exudation. More than once I have been led to believe the affection would result in pure diphtheria, when other symptoms and the prior history of the patient would rather lead to the opinion of acute tonsillitis. There are early and extreme prostration, and not merely the muscular pain of catarrh in the limbs, but often severe gnawing pains.

I have examined the fibrinous deposit repeatedly, but never discovered any cryptogamic growth therein.

Scarlatina has been said to be allied to diphtheria; and the two to be mutually prophylactic of the other.

Nothing has occurred to make me believe this to be true. In one of the worst cases, (a girl aged 7 years) scarlatina under my own superintendence had run its usual course not many months before.

The existence of albumen in the urine is simply common to diphtheria with almost every acute affection. So far as I have seen, the presence is transitory, and the quantity small.

Death results either from exhaustion or from suffocation, the result of extension of disease to the air passages in the form of croupy affection. The former is the most common. Two children, aged respectively 9 and 4 years, died from the latter cause under my own care. In neither instance would the parents consent to the performance of tracheotomy.

The treatment should be supporting from the very first.

Local applications with a glass brush or stick, of strong hydrochloric acid, once or twice a day at first, seem to be of most service. The nitrate of silver proves inefficient; and the resulting white tinge obscures the original affection. I can speak from personal experience of the very great relief that followed the free use of the acid.

Gargles of dilute hydrochloric acid (ʒij to ℥vi) seem of material service.

Internally I have given chlorate of potash (gr. x) with tincture of sesquichloride of iron (♏xx) every four or six hours; or cinchona in full doses (the compound tincture is preferable); or quinine with or without steel. If aperients be necessary, I give some few grains of rhubarb or some castor oil; but not a single dose of mercurials in any form. Beef-tea in such quantities as can be taken, wine *ad libitum*, and meat so soon as it can be swallowed, are most to be relied on.

Out of some 70 or 80 cases, I have lost 4 or 5 from the disease; and 2 or 3 more from the sequelæ of the affection.

The above is a bare sketch of the plan I have followed and found most satisfactory. There is much of interest in the sequelæ of the disease in the form of anomalous nervous affections; and these I hope at some future time to bring before the notice of the Branch.

Reviews and Notices.

On Diseases and Deformities of the Spine, Chest, and Limbs. Part i. Disease of the Spine causing Posterior Angular Projection, Abscess, and Paralysis. By Richard Hughes, M.R.C.S., L.R.C.P.Ed.(Exam.), Surgeon to the Brighton Orthopædic Hospital. Pp. 40. London: John Churchill. 1861.

Our author has chosen for himself a wide field, and one open to research. We regret to have only Part i of this work before us. In publishing a work of this nature in pamphlets, the author does himself injustice. In its present form, it will certainly not be read. In his preface, he excuses himself for his precipitancy thus:

> "I could wish", he says, "to have deferred any publication on this subject until wider research and larger experience had enabled me to offer to the profession an exhaustive work, in which all the points of interest should be fully discussed, and new light thrown upon such of them as needed it. But as day by day the conviction is more keenly forced upon my mind how utterly inadequate is the treatment, or rather absence of treatment, which is ordinarily afforded in cases of this disease; and, on the other hand, how great and sure is the success attainable by the means advocated in the following pages,—I can no longer delay to communicate to the profession and the public the benefit these means afford."

The object of all this hot haste is to describe an instrument, the benefit accruing from which he illustrates by four cases, which occupy eight of his forty pages, and which, to say the least, are most unfortunately selected, and only tend to exhibit the inutility of the means employed either to arrest disease or to remove distortion. Further, these four cases were not under our author's care, but under that of Mr. Amesbury, with whom he saw them from time to time; nor is there evidence in these pages of more experience than is to be gathered from an occasional visit to another surgeon's patient.

"The success attainable" depends in these cases, unfortunately, very little upon the surgeon, but rather on the nature of the disease and on the period at which it comes under treatment. It is well known that in the commencement it is an inflammatory affection, arising for the most part from accident; and that caries of the bodies of the vertebræ results, followed by abscess. It is the surgeon's aim to remove inflammation; and to this end he adopts complete rest of the affected parts. But also when suppuration has taken place, rest is essential, both to prevent the irritation which is occasioned by motion, and to diminish the secretion of pus, as well as to promote absorption. Now, absolute rest of diseased parts is not to be obtained without mechanical control; without it, the muscles are thrown into action, and they tend by their involuntary contractions to keep up irritation, notwithstanding that the recumbent position is constantly maintained. The form of instrument, therefore, which affords the most efficient support without impeding respiration, accomplishes in the most direct manner the object in view. Mr. Hughes has great faith in the superiority of the instrument he recommends. When, however, he has allowed himself time for "wider research", he will acknowledge that the principles of treatment which he supports have been advocated by others, and he will find that the instrument itself is known both "to the profession and the public".

When his book comes before us in a more complete form, we hope that the author will give us his own well digested opinions, and the results of his own experience.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S., late Professor of Chemistry in University College, London. Eighth edition, revised and corrected. Pp. 771. London: John Churchill. 1861.

The eighth edition of this excellent Manual has been issued under the auspices of Dr. Bence Jones and Dr. Hofmann. Few alterations have been required, by reason of the short time which has elapsed since the publication of the last edition. There has been added, however, to prepare chemists for coming events, the substance of Gerhardt's views on chemical notation. These views, we are told, are gaining ground; but the scientific world is hardly yet prepared for their general adoption; consequently, they have not been adopted in the text of the work. Whatever additions the advances of chemistry have required, we need hardly say, have been duly made in the Manual.

DR. BROWN-SÉQUARD'S

GULSTONIAN LECTURES

ON THE

DIAGNOSTIC VALUE AND MODES OF PRODUCTION OF THE VARIOUS SYMPTOMS OF DISEASES OF THE BRAIN.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS,
FEBRUARY, 1861.

The third lecture, which was delivered on Wednesday, February 13th, was commenced with a recapitulation of the doctrines laid down in the preceding lectures; and Dr. Brown-Séquard stated that in succeeding lectures it would be his object to point out the symptoms by which we may determine whether the nervous symptoms present in a case are the direct result of cerebral injury or disease, or the effects of alteration in the quantity or quality of the blood, or phenomena arising from reflex irritation.

Reverting to the subject of paralysis, with which the second lecture concluded, Dr. Brown-Séquard reminded his hearers that he had shewn that all forms of this affection may be produced by reflex action; and he would now endeavour to point out in what way this occurs.

When we meet with a case, *e.g.* of prolapsus of the uterus, attended with paralysis of the lower limbs which is at once removed by replacement of the displaced organ, it is evident that the paralysis must have had its starting point either in the womb or in the neighbouring parts. We cannot suppose the paralysis in such a case to have had its primary origin in the nervous system: but we are forced to the conclusion that an irritation has started from the organ affected or from neighbouring parts, and has been conveyed to the brain or spinal cord, where it gives rise to some change, so as to produce paralysis.

But reflex irritation may also produce paralysis in another way—by giving rise to inflammation in the nervous centres: this fact has been pointed out by Dr. Gull. The inflammation may be due to transmission through the blood-vessels, or by continuity; but there are cases—and the lecturer knew of many such—in which it can only be the result of reflex action. Lallemand has recorded a case in which inflammation of the brain followed an injury of the axillary nerve.

Paralysis, as a result of reflex irritation, may also be produced by congestion in the brain or spinal cord, or by a diminution in the amount of blood sent to these parts. The production of paralysis by congestion has been observed in cases of neuralgia. But commonly the reflex paralysis is due to contraction of the blood-vessels at some part of the nervous centres; for instance, at the origin of the optic nerves, when there is loss of sight; or at the origin of the auditory nerves, when there is loss of hearing. Dr. Brown-Séquard had seen a case of sudden loss of power over the whole body, except that the muscles of respiration were not affected, and some power of speech was left; consciousness was retained. Partial paralysis, consciousness being left entire, occurs often in epileptic patients; but not in them alone, for it is sometimes met with in comparatively healthy subjects, in whom it may be produced by some local source of irritation, as piles. Time did not permit the lecturer to enter on the direct proof of the production of paralysis from contraction of the blood-vessels; and in many of the cases to which he had referred there was no absolute evidence that this had taken place; but there was no other way of accounting for the phenomena presented.

Another kind of paralysis is produced by a disturbance of the nutrition of muscles, as a reflex result of irritation of nerves in the skin or elsewhere. Several cases have been observed, in which muscular atrophy has attended neuralgia. In one instance, a man had received a wound at the inner part of the forearm: and the irritation propagated from the injured nerve gave gave rise to atrophy and paralysis of the muscles at the outer side of the arm. The lecturer had also seen a similar case in Paris; in which, however, both the arms were affected with wasting palsy.

The characteristic signs of the paralysis arising from reflex irritation were pointed out to be the following:—1. There is an external source of irritation. 2. There is a correspondence in degree between the irritation and the paralysis: when the irritation is diminished, the paralysis is diminished; and *vice versâ*. Hence in this form of paralysis it is extremely common to find variations in intensity. 3. As a corollary from the preceding proposition, when the irritating cause ceases, the paralysis either ceases spontaneously, or generally (but not always) gradually diminishes. 4. In cases of paralysis from reflex irritation, it is almost useless to treat the paralysis directly, so long as the cause exists. 5. In cases where the nervous centres have been examined after death in cases of simple reflex paralysis, no alteration in them has been found. This is not a very strong proof in itself that a case of paralysis is of reflex origin; but the fact has been observed in cases in which the reflex origin of the paralysis has been positively determined during life. One case especially is recorded by Dr. Gull in *Guy's Hospital Reports*, and it is of great value, from the accuracy of the observer, and from the circumstance that the examination was made with the view of proving the reverse of the proposition laid down by Dr. Brown-Séquard. Other observers, without preconceived views on either side, as M. Ch. Robin, have also failed to detect morbid changes in the nervous centres in such cases.

The lecturer now mentioned some cases in order to shew how paralysis may occur from reflex irritation.

One instance had been presented in himself. Having contused his left elbow by a fall from a car, he was almost immediately seized with paralysis in both arms, that in the right arm being the more intense. The paralysis continued for two or three months, and was gradually modified as the local effects of the injury diminished. One day, however, having exerted his left arm more than usual, he found the paralysis of the right arm increased.

A patient had prolapsus of the rectum, with piles at the left side of the anus. Paralysis appeared in the lower limbs; then in the left arm; then in some of the muscles of the left side of the face. The prolapsus was cured by treatment; and the patient recovered from the paralysis.

The lecturer again called attention to Dr. Churchill's statement respecting paralysis in pregnant and puerperal females. How was it produced here? Most of the women had albuminuria: and so the paralysis may have depended on alteration of the blood. But, as the paralysis in them was limited, there is an apparent objection to its origin from change in the blood, which, being general in its nature, ought to have a general effect; still, this is not sufficient to set aside the idea that the albuminuria caused the paralysis. But in some of the cases noted by Dr. Churchill there was no albuminuria; and it was in the early months of pregnancy, when albuminuria is not met with, that the paralysis occurred in several instances. What effect chlorosis may have as a cause of paralysis in pregnancy, is not known.

Paralysis has been observed to attend inflammations of distant organs; M. Gubler has collected forty or fifty cases of the kind. In some such instances, the paralysis may have arisen from the alteration in the blood: but in some, it was removed when the local irritation was removed, and therefore can only have been produced by reflex action, through the nerves.

Paralysis may be produced from reflex action originating in a portion of the brain itself, which then acts in the same way as any organ placed at the periphery of the nervous system. Where the superficial fibres of the crus cerebelli, just at the origin of the fifth pair of nerves, are irritated by an inflamed dura mater, or by a tumour, paralysis is produced on the same side of the body: it is almost always accompanied by muscular cramp or stiffness, is never complete, and is never attended with anæsthesia. But, if the superficial nervous fibres in the crus cerebelli be destroyed by an injury, then the paralysis occurs on the opposite side. Hence it cannot be from direct interference with the conductors of the will to the muscles that paralysis is produced in the former class of cases; it is the result of irritation, which requires the integrity of the pons Varolii on the opposite side for the development of its effects. Dr. Brown-Séquard had collected eighteen cases of the kind; and Dr. J. W. Ogle has recorded one instance of paralysis produced by the irritation of an intracranial aneurism.

The cerebellum may be almost entirely removed without the production of paralysis; but this may be produced by the irritation of many parts of the organ through pressure, as of a tumour; the paralysis being of the same nature as that produced by irritation of the crus cerebelli.

Dr. Brown-Séquard now noticed certain forms of paralysis, as hysterical paralysis, paralysis attending syphilis, etc.

He at first believed that hysterical paralysis was a simple reflex form of the disease; but further observation has led him to the conclusion that there is no real hysterical paralysis—that is to say, that the paralytic symptoms presented by hysterical patients are mostly those which are observed in other persons. The reflex form is the most common; but we also meet with other kinds. If we examine a hysterical patient with paralysis of the lower limbs, we often find all the symptoms of congestion of the spinal cord. It is important in these cases to determine whether the paralysis is of reflex or of congestive origin; for the remedies which would relieve in the one case would only do harm in the other.

Syphilitic patients often suffer from paralysis; sometimes arising from congestion, but most commonly from fibro-plastic deposit in the neurilemma at the exit of the nerves from the spine, or from disease of the bones or periosteum. The syphilitic paralysis is characterised by appearing in many parts of the same patient at the same time. A very important symptom is the dropping of one or both upper eyelids, which is rarely absent in syphilitic patients who have other signs of disorder of the nervous system.

The paralysis which accompanies rheumatism is almost always of reflex origin; it may be produced by the pain.

Regarding the influence of gout in producing paralysis, the lecturer had not had sufficient experience to enable him to speak with certainty. It is possible, however, that gouty deposits may give rise to paralysis.

In concluding this lecture, Dr. Brown-Séquard briefly pointed out some of the principal points to be observed in determining the origin of a paralysis. In the forms of the affection arising from alterations of the blood or from reflex action, there is often a remarkable variation in the intensity of the symptoms; and this is an important fact to be observed. And, when paralysis owns either of these origins, it is important to detect the immediate cause. As to actual disease of or injury in the brain, fixed pain in many cases points to its presence; there may in rare cases be pain in the reflex affection and in chlorosis, but then it is not confined to one spot.

Best mode of Preventing Injurious Effects from Nitric Acid or the Sulphate of Copper when used as Caustics. From observations of the beneficial effects following the use of oily applications to issues made with potassa fusa and with the potassa cum calce in preventing undue corrosion, and in allaying pains, there has, Dr. Fraser considers, originated the practice of likewise applying the same oleaginous substances to check the corrosive action of nitric acid when applied to phagedenic sores, ulcers, hæmorrhoids, etc., a practice still too commonly followed; but a very few moments' consideration of elementary chemical principles would prevent such an error. The alkali potash can be prevented from burning the skin too deeply if we apply oil over the part, for the excess of potash and oil uniting form a comparatively inert soapy compound; but nitric acid has no such affinity, for oil does not unite with it; it is merely floated off in drops on the surface of the oil, as can be readily seen by a moment's inspection. Instead of oil the proper application would be a dilute alkaline fluid, as carbonate of soda with water, or even a plentiful ablution with water, which, by diluting the acid sufficiently, would prevent its further caustic action; after doing this, there is no possible objection to use as much oil as we please, as a soft and emollient application to the corroded part. Similar remarks apply with equal force to the common custom of using oil to the eyelids after cauterizing them with sulphate of copper for the cure of granular lids. The suitable application after using this caustic is water and not oil, applied to the cauterised part, until by diluting the excess of sulphate of copper sufficiently, it is rendered too weak to act any longer as a caustic.

DR. B. W. RICHARDSON'S

LETTSOMIAN LECTURES

ON

CERTAIN OF THE PHENOMENA OF LIFE.

DELIVERED BEFORE THE MEDICAL SOCIETY
OF LONDON, FEBRUARY 1861.

The second lecture was on the Phenomena of the Calorific Process in the Animal Body, and was delivered last Monday evening. Dr. Richardson commenced by stating that he should endeavour to establish the following propositions:—

I. Caloric is the primary cause of motion in nature; and it is therefore a primary cause of life, in so far as motion represents life.
II. The evolution of animal caloric takes place mainly in respiration.
III. The evolution of the caloric (*i.e.*, the combination) is due to extreme distribution of both the oxygen and the oxidisable material over the capillary surface.
IV. Heat is the source of animal power, and is alone sufficient to restore muscular irritability.

I. All observation, Dr. Richardson remarked, leads to the inference that the sun, acting by means of caloric, is the source of all physical power. We have evidence of this in measuring the amount of life, animal and vegetable, throughout the world; for we find that the proportion of life and of motion, from the poles to the equator, corresponds with the heating power of the central luminary. Further, when we desire to supplement nature, we call caloric into action; as in the warming of our bodies at the fire; in the application of heat to the artificial forcing of flowers and fruits; in the employment of heat in the processes of the chemical laboratory or of the iron-foundry; and in the production of motion by the alternate expansion of water into steam and condensation of steam into water.

In such circumstances as these, no one thinks of attributing the results to any other force than caloric: it is only when we enter into philosophical subtleties, that we speak of other and correlative forces. And, when we turn to the contemplation of these, we find that caloric is still the primary force: first and last in action, and universal in presence and in production. Light and electricity have indeed their own specific properties and duties. But light, except in its reflected form, is always the accompaniment of heat, and emanates under the same circumstances. Electricity is not simply a correlative but a derivative of caloric: is is generated by similar processes, and is resolvable into the same force. When the points of a powerful electro-magnetic machine are directed on combustible matter, caloric is manifested. Going back in the machine, it has been caloric that charged the magnet. It has changed in character, indeed, as under other circumstances it would change from the latent to the sensible form; but that it is caloric. Ice brought into contact with it is melted; water is resolved into its gases.

The law of the agency of caloric in the changes of the material universe has been ably elucidated by Metcalfe, in his work on *Caloric and its Vital Agencies.* According to him, all matter consists of ponderable substance held in solution by the imponderable caloric, the ponderable substance being sometimes diffused in the utmost state of dilution, as in hydrogen; sometimes extremely condensed, as in frozen mercury; and all the modifications between these conditions are due to the addition or subtraction of caloric. This position taken, Metcalfe lays down the proposition, that all the changes in the constitution of matter lie in the modifications of the imponderable menstruum; that caloric has for itself a diffusive and repulsive property; while for other bodies composed of ponderable matter it possesses affinities varying in force with the size of the molecules of such matter; in other words, that centrifugal force or repulsion is the direct action of the diffusion of caloric; while centripetal force or attraction signifies the direct loss of caloric, and the combination of the particles of the ponderable material, as their diffusing medium is withdrawn from them.

This proposition being accepted, the motion-producing agency of caloric extends to the production of all action, in animate as well as in inanimate matter. Muscles, flexible at 96° Fahr., are rendered contracted and rigid by lowering the temperature; and on reapplying gentle warmth, the motion is restored. An animal at rest converts a certain weight of carbon into carbonic acid, and liberates a certain proportion of water; the same animal in active motion gives out a greater measure of carbonic acid and volumes of visible vapour of water. What is the *physical* difference, as to cause and effect, between the steam evolved by the animal and that evolved from a steam-engine?

In so far, then, as motion represents life, caloric is the source of living motion. It may be modified in apparent character; it may be called, in its varied forms, by such names as electricity, galvanic force, or magnetism; but still it is the alpha and omega of them all.

II. Since the time when Black discovered that the products of respiration were identical with those of a coal fire, various answers have been given to the question—Where in the animal organism is the heat evolved?

The earlier observers were nearly unanimous that the whole of the heat is "generated" in respiration. Afterwards the idea was broached that the animal heat is made in the systemic circuit; and this idea, having gradually gained strength through the support of John Davy, Collard de Martigny, Magendie, Lagrange, Magnus, and many others, has been raised to the position of a scientific dogma by the hypothesis of Liebig, that the blood-cells are carriers of oxygen. Dr. Richardson had closely attended to every point of the argument; and, in spite of his early convictions, had been brought to the opinion that Black and his followers were correct—that the main part of the caloric is evolved in the lungs.

The arguments alleged in favour of the systemic source of animal heat are:—1. In respiration a certain portion of oxygen (0.61 per cent.) is lost, beyond what is returned by direct evolution or in the form of carbonic acid. 2. Oxygen exists in arterial blood as gas, and also in combination with the iron of the blood-corpuscles. 3. Venous blood contains carbonic acid. 4. When oxygen is brought into contact with venous blood, carbonic acid is evolved, oxygen is lost, and the colour of the blood is changed from dark purple to red. 5. The temperature of arterial blood is not sufficiently elevated above that of venous to account for all the heat evolved in the system. 6. In the changes which occur in the organism (nutritive changes) caloric is ofnecessity evolved. Each of these points was examined *seriatim*.

1. Dr. Richardson admitted that a certain proportion of oxygen is lost in respiration; and further, that this loss is accounted for by the presence of nearly the same amount of free oxygen in arterial blood. But the lost oxygen thus accounted for is entirely inadequate to supply the 4.26 per cent. of carbonic acid thrown off in respiration; indeed, nearly the same proportion of oxygen is found (in the form of carbonic acid) in venous blood.

2. But it is argued further, that the oxygen used in the system is that which is taken up by the colouring matter of the blood, at a temperature of 98°, to the amount of 13 per cent. That blood, exposed to air over a wide surface, is capable of taking up oxygen, Dr. Richardson knew from experiment; but, within a limited degree, this fact appertains to arterial as well as to venous blood, and in both there is a limit beyond which oxygen will not be taken up.

But, supposing that oxygen enters into combination with the hæmatin, this does not prove at all that this oxygen is about to be carried into the system by the blood-colouring matter, to be liberated for the production of heat. When oxygen is added to blood, it is taken up in exact proportion to the amount of carbonic acid liberated; and that this does not depend on the preexistence of carbonic acid in the blood, is proved by the fact that the same event occurs after the blood has been entirely freed from carbonic acid. Hence, the act represents a direct chemical combination; in fact, oxygen as a simple body cannot displace carbonic acid without combining first with some substance so as to produce either a base or an acid. Further, if oxygen enter into combination with the iron of the hæmatin, it must, in passing from the gaseous to the solid state, yield caloric. What becomes, then, of this caloric? If it diffuse itself through the blood, then the blood is heated in respiration. If it unite with carbonic acid and water, and thus be exhaled from the lungs, then the blood is cooled by respiration, and is sent round the body carrying oxygen combined with a base—in a form incapable of giving forth any caloric until it is recharged with caloric or electricity. Dr. Richardson then denied altogether that iron charged with oxygen (as sesquioxide or as protoxide) ever gives out oxygen for heating in the animal economy.

It is much more simple and logical to infer that the oxygen, coming into contact with the blood, combines directly with the carbon; that, escaping then as carbonic acid, it yields up a portion of caloric to the circulating fluid; and that, *minus* the small amount of combustion effected in the systemic circuit by the fraction of free oxygen absorbed, the source of the caloric is in the respiratory act.

3. Venous blood indeed contains carbonic acid; but so does arterial. Magnus found the proportion of carbonic acid in the venous blood of the horse to be to that in the arterial as 18.8 to 17.7; while in the calf the proportion was 16.3 to 16.4. Dr. Richardson had himself found the evidence of free carbonic acid as marked in arterial as in venous blood; and in two instances even more so. If this similarity in the proportions be allowed, then the proportion in venous blood is insufficient to account for the quantity expired. The presence of carbonic acid in venous blood may be thus explained. In respiration, a little carbonic acid and a fraction of oxygen go over to the arterial side: in the systemic circuit, the carbonic acid is excreted; and a portion of the free oxygen is turned into carbonic acid, and, if not also eliminated, passes into the veins. These acts may be important, especially in diseased conditions; but, in the general production of animal heat, they are altogether minor.

4. As to the change of colour being due to oxygen, there is no doubt that, when dark blood comes into contact with oxygen, it becomes arterial in colour; but that the change depends on the absorption of oxygen by the hæmatin, is a gratuitous assumption. Common salt, or syrup, added to venous blood, will also turn it red. If water or ice be added to red blood, it becomes dark; but if this darkened blood be passed a few times through tubing heated to 140° in a bath, the arterial colour is regained. [These facts were illustrated by experiments.] Again, if two animals be killed, one by extreme cold, and the other by extreme heat, the blood on both sides is equally dark in the former, and equally bright (rather of a mixed or capillary colour) in the latter. All these changes in colour, Dr. Richardson said, are due to simple physical changes in the structure of the blood-corpuscles; salt, sugar, and heat, causing them to become biconcave; water, or cold which causes the retention of water, rendering them biconvex, and causing them to disperse the light. The same effects are observed in physiological and in pathological states. The blood of the renal veins is brighter than other venous blood, because it has been deprived of more water; and in the tropics the venous blood is almost always red. After the sweatings of phthisis, the venous blood is brightened; when the function of the skin is arrested and there is no compensation, the arterial blood becomes dark.

The cause of the change of colour of the blood from dark to red is, then, the evolution of water in the pulmonic circuit. Oxygen is no doubt required for this, because the amount of heat required to liberate the water would not be otherwise presented; but, beyond this, oxygen is no more essential to the colour of the blood than any other substance capable of increasing the contraction of the blood-cells.

5. Dr. John Davy found that in sheep and lambs the temperature of the arterial blood is from 1° to 1.5° higher, and in the bitch 3° higher, than in venous blood. From observations on a dog, a sheep, and four oxen, Dr. Richardson found a mean increase of 2° on the arterial side; and various other observers have found the temperature of arterial to be greater than that of venous blood. Hence the fact may be taken as proved; but the assumption that the extra amount of heat is not sufficient to supply the animal body, is desti-

tute of proof, and indeed breaks down on inquiry. For, if about two hundred ounces of blood pass through the lungs each minute, and in the same time twenty-one cubic inches of carbonic acid are formed, an amount of caloric equal, on the whole, to 120° Fahr., will be transmitted to the general system, already nearly heated to the required point.

But the most cogent argument against the hypothesis of the evolution of caloric in the systemic capillaries is given by Metcalfe, who observes that, if this evolution took place as supposed, the venous blood should be of a higher temperature than the arterial. But the reverse is the case; for the blood is at its coldest at the commencement of the venous trunks. Again, the blood in extreme parts is for the same reason easily chilled when there is an interference with the caloric-evolving power of the lungs.

6. As to the argument that caloric must be evolved in the systemic changes, Dr. Richardson said that these changes cannot occur without heat; still they may take place without the evolution of heat as a result. Further, the degree of secretion is modified almost exclusively by the influence of external heat.

Dr. Richardson next passed to the relation of certain experimental facts. Reasoning that, if oxygen simply displaced carbonic acid from the blood, it ought to be of no consequence where the oxygen was introduced, he had injected it (both as gas and in peroxide of hydrogen) into the veins. In each experiment, the blood became red, and the oxygen was retained in the blood; but, instead of favouring the escape of carbonic acid through the lungs, it arrested the circulation in these organs, and caused death by asphyxia. Again, if the lungs of a recently killed animal be placed in a closed glass chamber, and, by means of suitable arrangements, freshly drawn blood, deprived of its gases, be driven into the pulmonary artery at the same time that artificial respiration is kept up, carbonic acid is found to be evolved through the trachea. That carbonic acid is made in the pulmonic circuit; a certain increase of heat is produced; and the blood becomes red in colour.

iii. It has been surmised that animal heat is the result of the oxidation of hydrogen as well as of carbon. This point remains in abeyance; but, assuming that water is produced chemically in respiration, Dr. Richardson would confine his remarks to the oxidation of carbon, as the process would be the same in both cases.

What are the conditions under which carbon enters into combination with oxygen? If we try to make a piece of common carbon combine with oxygen, we find that we must raise it to a red heat—that is, we must diffuse the carbon. Even hydrogen requires a spark before it will unite with oxygen.

How is it that carbon combines with oxygen in the living body at a temperature below 100°? If we place a wick in blood, it will not burn at any temperature; for ammoniacal odours are evolved, in the presence of which oxidation cannot occur. Dr. Richardson believed that the combination in the body is explained by an extreme distribution of the combining elements.

A stick of phosphorus placed in dry oxygen, undergoes no change; placed in a bottle of common air, it undergoes slight oxidation. But, if phosphorus be dissolved in bisulphide of carbon, and a few drops of this solution be spread over a surface of paper, both the oxidisable substance and the oxygen are widely diffused: the bisulphide of carbon evaporates, and, the phosphorus combining rapidly with oxygen, combustion is the result.

There is a close analogy between these facts and those observed in the animal economy. In an animal confined in oxygen, the oxidation process is diminished (see the first lecture); when blood is confined with air, there is imperfect combination; when diluted oxygen is applied to blood (*i.e.*, carbon) distributed over the capillary surface of the lungs, the combustion is perfect. Further analogies might be shewn by admitting one-fifth of nitrogen into the jar of phosphorus and oxygen, and observing the effect produced at different temperatures. We require only to know how to dissolve carbon in the same manner as phosphorus, in order to fully understand the secret of animal combustion. Perhaps, in the production of animal heat, there are some minor agencies at work, such as the presence of albuminous bodies, which gives a strong tendency towards the separation of carbon and hydrogen from amylaceous compounds, and towards their readier connexion in common air into carbonic and water. In ordinary vinous fermentation, such changes go on at a temperature even lower than that of the body: but both in this case and in animal respiration, the combination of oxygen and carbon is due to the same cause—extreme distribution.

iv. In commenting on the fourth proposition, that caloric is the essential of animal motion, Dr. Richardson remarked on the known necessity of a sufficient amount of caloric for the acts of digestion and nutrition. For sensation, also, caloric is required; when it is removed from a part, sensation ceases; when it is intensified, sensation is exalted. The pain of inflammation arises from the radiation of caloric; and the difference between the pain in one inflamed spot and that of a burn is but one of degree.

Dr. Richardson called attention to the circumstance, that in 1853, he had exhibited to the Society some experiments to shew that in young animals, even after death, the action of the heart could be restored by inverting the body so as to pour blood from the lower vena cava into the organ; and that this would take place even after the connection with the nervous system had been severed. He then believed the reestablishment of the contraction to be due to the specific effect of blood on the muscular structure of the heart: and, having produced the same effect by the injection of blood mixed with pure oxygen, of moist oxygen with water-vapour at 96°, and of water at blood-heat, charged with peroxide of hydrogen, he inferred that in all these cases oxygen was the cause of the renewed action. He observed, however, that after a time the muscular action ceased, although there was still blood to flow; and that it was not restored by the mere charging of the blood with oxygen. Hence the idea gradually developed itself, that the motion was probably due to caloric.

He, therefore, repeated the experiment of inverting the body of a killed animal; but before opening the thorax, he placed a lump of ice in the peritoneum.

When the cooled blood was allowed to flow into the heart, one contraction took place, and all motion ceased.

Having narcotised a rabbit with chloroform, Dr. Richardson made it breathe chilled air until all action of the heart had ceased. The chest being laid open, artificial respiration with cold air was kept up; the heart was motionless, and its contents were filled with dark blood. The cold air was now replaced by a current of air heated to a little above blood-temperature; as soon as this filled the lungs, the right auricle began contracting vigorously, then the left auricle, then the right ventricle, and lastly the left ventricle. Complete rhythmical action was established; and the lungs, previously blanched, became red. After some minutes, the hot air was replaced by cold; the action of the heart declined. The alternate administration of hot and of cold air was repeated several times with the same results, until at last contraction ceased. Similar results were produced by the direct application to the heart of cold and heat (ice and water at 143°) alternately.

In other experiments, Dr. Richardson had laid bare the muscles of the legs of animals, and had found that the application of ice rendered them insensible of the galvanic stimulus; while their contractility was restored by the application of water at 160°. In other animals (dogs and rabbits), he had excited contraction in all the muscles of the body after apparent death, by injecting into the aorta water at 120°.

These experiments, he observed, showed that heat is more effectual than electricity in restoring muscular contractility. Hence, he inferred that, in other cases, where recontraction has been induced by the injection of warm fluids, the effect has not been due to any specific properties in the fluids, but to the caloric that was carried by them.

British Medical Journal.

SATURDAY, FEBRUARY 23rd, 1861.

A DINNER-PARTY: THE EDINBURGH COLLEGE OF PHYSICIANS.

We have already alluded to the triumphal entry of Dr. Alexander Wood into his third year of presidency of the Edinburgh College of Physicians—in itself an honour of no mean account; for, as he says, "our laws render it very difficult of attainment." Now if ever there was an occasion, upon which, one would have thought, a man might have been, for the time at least, contented with his lot, this surely was one. A third presidency, excellent cheer, warm friends, his own portrait—presented as a token of collegiate admiration—smiling before him; himself the hero, *victor ovansque*, of the great occasion—surely these excellent sweets might have tempered down, if, as other performers say, for this night only, the sours and bitters of a president's life. They would have done so on this side the Tweed; why, then, did they fail to allay the sensitive irritability of Dr. A. Wood? We can only guess.

We should not have noticed the post-prandial exacerbations of this gentleman's irritability, had he confined himself to a mere general explosion of unkindness against every thing which was not Edinburgh College of Physicians. But the truth is that he has entered into particulars, and in doing so has made one or two rather important mis-statements, which require refutation, as they have been widely circulated. He says, for example, that a proof of the excellent pudding which has been concocted by the Edinburgh College of Physicians—he being the *chef* in that *cuisine*—is this: that "our policy has been fully adopted by the London College." Herein Dr. Wood is in great error. The fundamental policy of the Edinburgh College is competition, at any price, with universities and all other medical corporations. And such a proceeding the London College utterly repudiates. The Edinburgh College allows its Licentiates to assume any title they please; the London College does not. Their policy, therefore, is *not* identical. Let the Edinburgh College pass a respectable bye-law similar to the one passed by the London College, and its occupation would be gone:

> "No Licentiate of the College (of London) shall assume the title of Doctor of Medicine, or use any other name, title, designation, or distinction, implying that he is a Graduate in Medicine of an University, unless he be a Graduate in Medicine of an University."

When the Edinburgh College has courage (we will not say honesty) enough to pass such a law as this, it may begin to boast of having a similar policy with the London College: until then, not. Such a bye-law would suppress the Hamlet in their play. The Apothecaries' Hall Dr. Wood calls "a monstrous hybrid." He rattles away at the "exclusive policy of the London College," and "at the selfish and monopolising policy of the University of Edinburgh." In fact, as we have said, every thing not Edinburgh College is gross and unsuitable. Even our humble selves come in for a share in the blessings of this after dinner horn of grace. We refer to the fact, because happy to find that our small efforts to denounce one of the most successful sale of licenses ever recorded in the annals of scientific free trade, were duly appreciated:

> "Somewhat similar was this London outcry: in his place in the College of Physicians, as a contributor to one of the London journals, and more lately as editor of another, the same individual was our assailant."

We gratefully accept this passing tribute *in memoriam* of the past; and, as a certificate of the correctness of our opposition, recommend to Dr. Wood's attention the following words of the present President of the British Medical Association, himself a Fellow of the Edinburgh College of Physicians :—

"Nothing, I think, in modern days has been more disgraceful than the conduct of the Edinburgh College of Physicians in the matter of selling their diploma. Their conduct not only lowers the profession and its corporations, but it perpetuates a system of deception in the matter of medical titles, which is not removed in a generation, which seriously interferes with all medical legislation, and gives a factitious honour to the worst educated and lowest class of medical practitioners."

SPONTANEOUS GENERATION.

The following masterly summary of the present position of the once ancient and now modern doctrine of spontaneous generation is from the pen of the far-famed naturalist, M. Quatrefages (*Revue des Deux Mondes*). It is worthy of note at this moment, when so many of our modern philosophers are striving to trace the origin of our species down to a simple monad or up to a complicated monkey. M. Quatrefages shows clearly enough, at all events, that the lowest infusorial animalcule did not arise from any "fortuitous concourse of atoms"; and that, however low in the scale of created beings the living organism may be out of which the complicated and highly developed creature called man has, by a series of developments and of evolutions and involutions, been produced, at all events he did not have a pebble for his first ancestor. This is, at least a consolation.

"The doctrine of spontaneous generation appears to us definitively settled. It is, in fact, difficult to understand how such a doctrine can still have partisans amongst men whose merit is otherwise incontestable. Their number, however, diminishes daily; and most of them, no doubt, repeat the exclamation which we heard from the mouth of a very skilful chemist who was long a thorough believer in spontaneous generation, 'And so vanishes another, another illusion!' This he said after a long conversation concerning the unanswerable experiments of M. Pasteur. These experiments refute, in fact, the last delusions, and may be addressed to several other *savans*, and amongst them to MM. Schwann and Henle. These observers had already operated, in a comparative way, on infusions or mixtures, some of which had been exposed to the air, whilst others had only been subjected to air which had been passed through strong acids or tubes heated to a red heat. In the first case, they invariably found that a crop of infusoria was rapidly produced; whilst in the second case no trace of organic production was found. Schwann, Henle, and almost all naturalists, had concluded from these facts that the vegetable and animal bodies which appeared in the infusions were derived from germs in the air, and deposited in the form of dust; and that they did not result from the reaction of the dead elements which enter into the composition of the infusion or the mixture. They had also admitted, as equally true, that in order to prevent the appearance of infusoria, etc., all that was necessary was to disorganise these germs, either by heat or by some other means. The partisans of spontaneous generation replied, that the air in passing through a heated tube, or through acids, although not altered in composition, was thereby rendered unfit for giving birth to an organised being; the air, they said, was thereby rendered inactive. Moreover, they denied the existence of germs, notwithstanding that these had been seen and described, particularly by Ehrenberg. Now, M. Pasteur, by the means of very ingenious experiments, has collected these germs, and has sown them in infusions subjected to that kind of air which was said to be inactive; and they have there perfectly developed themselves. The same observer has also shown that, if the vessel which contained the infusion was of such a form that the germs could not reach the liquid, no trace of growth would be found in it, even when it was in direct communication with the air. The existence of the germs, and the character which they play in the pretended phenomena of spontaneous generation, have been placed beyond all kind of doubt or discussion in the mind of those who derive their convictions solely from observation and experiment. We may add, that the beautiful researches of M. Balbiani, on the sexual reproduction of infusoria, have brought this group under the general law, and have thereby taken away from the partisans of spontaneous generation the last arguments which they might have drawn from the want of information formerly existing on this subject."

THE WEEK.

The London College of Physicians is now actually at work in the examining and making of Licentiates of the renowned third class. We are sure that the profession will, as a body, hear the fact with satisfaction. The College has again and again been twitted with its neglect in not having, in famous 1815, taken under its supervising wing the medical practitioners of the country. It has now marched up to the level of the times, and has proved that it can be as liberal as the spirit moving on the face of the aforesaid times can require. In future, then, from the Royal College of Physicians of London, a license in medicine may be obtained (after due and proper examination) which shall entitle the holder to all requisite privileges. It is well to call to mind the fact, that the College for very many years granted its licence with the same privileges, and on the same conditions, it has now decided to revive; and, although hitherto justly reproached with the unnatural offence of having abandoned its own offspring, this charge can no longer be brought at its door. As regards the "legal privileges," etc., which this licence gives its holder, we would observe: the College licence does not confer on its possessor the legal privileges of the apothecary to the extent of allowing him to keep an open shop and sell pennyworths of salts over the counter, but it qualifies him to register as "Licentiate of the Royal College of Physicians of London;" to practise medicine in any part of Her Majesty's dominions; "to demand and recover in any court of law with full costs of suit, reasonable charges for professional aid, advice, and visits, and the cost of any medicines supplied by him to his patients;" and it qualifies him to hold appointments under the Poor-law Board, provided he possess a qualification in surgery also. But besides this, he has a privilege under the College licence which the medical practitioner, unless a graduate in medicine of an university in the United Kingdom, has been unable for years past to obtain: *the privilege of being a member of a profession, not in name only, but in deed.*

A CORRESPONDENT has called attention to a point of great interest to a large section of the profession; we might almost say that the honour of the profession was to some extent engaged in it. It cannot be right that we should call upon Government to protect us against the encroachments of quacks and illegal practitioners, and at the same time ourselves make use of the services of men unlicensed to practise medicine. We cannot with justice exclaim against the common practice of shipowners engaging unqualified men to attend their ships, if we, as medical men, ourselves employ unqualified men to attend our patients. There is another serious grievance which results from this, we fear, too common custom. The regularly educated medical man, in seeking the position of assistant to a practitioner of medicine, is exposed to unfair competition, and consequently does not obtain a fair reward for his services. We have no hesitation in saying that the system of employing unqualified assistants is derogatory to the profession at large, and seriously injurious to the interests of many individual members of it.

THE vexed question, "Who is a Doctor?" will not improbably find its settlement, partial or complete, in a court of justice. Our readers will remember that the College of Physicians in Ireland claims, under special powers, the right of granting the doctorate to its members. Its legal advisers say it has such distinct powers; consequently, it demands admission for its M.D. title into the *Medical Register.* This, of course, is a poser for the Medical Council. The Council therefore seeks advice of its counsel learned, and counsel learned advise that no such title of M.D. can be appended in *Register* to the Licentiate of the College of Physicians in Ireland, if he possess no other more distinct claim to it. Hence we may conclude that we shall shortly hear of a *mandamus* from the Court of Queen's Bench, and the question aforesaid battered about by the gentry of the long robe. We sincerely trust they may be more lucky in dealing with it than our own profession has hitherto been.

MEDICINE has at last, under the judicious fostering of Lord Herbert, been allowed to have its free play in superintending the health of a campaigning army. It is gratifying to read the results, as described by Lord Herbert in proposing the vote of thanks to the forces engaged in the recent China expedition:—

"The army in China had an excellent medical staff; and for the first time an attempt has been made to introduce the system of appointing a medical officer for purely preventive and sanitary purposes. The result has been, I am told, that not only has there been more attention to prevention, at all times better than cure, but it has diffused the same spirit of care among the officers, and certainly the greatest success did attend the operations in a sanitary point of view. I have heard criticisms made of the cost of these precautions, and I have heard it said that if the cost of these hospital ships were divided by the number of patients on board of them it would show that each patient cost an extraordinary amount. But that was because the expedition had been so singularly healthy. If there had been a great amount of sickness the cost of each patient would, of course, have been much less, but the apparent large cost is the result of the success which has attended our sanitary precautions. After all, what expense can be too great, within reasonable limits, which insures that your army shall be perfectly efficient? When including casualties of all kinds, deaths and wounds, we find there was a better state of health and a lower rate of mortality among the troops forming the expedition in China than usually exist among troops in tropical climates in a time of peace, the success of the sanitary measures that were adopted is beyond dispute."

MR. NUNNELEY of Leeds has forwarded us a copy of some correspondence which he has had with the Secretary of the Royal College of Surgeons of England, regarding the certificates of instruction in vaccination, to be presented by candidates for the diploma. In a letter to Mr. Belfour, dated December 1st, Mr. Nunneley stated that considerable anxiety and alarm existed in the minds of both surgeons and medical students as to the regulations of the College of Surgeons respecting certificates of vaccination; for it was not well understood whether the Council of the College meant only to receive the certificates of certain men whom the Privy Council had selected in a few places to vaccinate and thus altogether to ignore the qualifications of the members of the College, or whether the certificate of any member that under his personal superintendence a student had vaccinated and seen a sufficient number of cases of vaccination would be received. The result has been that in a letter from Mr. Belfour, dated the 4th of the present month, Mr. Nunneley is informed that, although the Council would prefer that candidates for the diploma of the College should obtain instruction in vaccination at the recognised hospitals where they receive instruction in the other branches of surgery, the Council are prepared to receive such certificate from qualified practitioners possessing the means of giving efficient instruction in vaccination; and in accordance with such resolution of the Council, the court of Examiners will require such certificate to be in the following form:—

"I hereby certify that Mr. —— has received instruction in the principles and practice of vaccination from me for a period of upwards of six weeks: that he has witnessed the progress of the vaccine vesicle in more than twenty cases under my care; that he has vaccinated successfully; and that he is acquainted with the mode of preserving lymph in capillary tubes."

Progress of Medical Science.

Syphilitic Disease of the Liver. According to Frerichs, the syphilitic process manifests itself in the liver in three different forms: 1, as simple interstitial hepatitis and peri-hepatitis; 2, as gummy hepatitis (*gummöse hepatitis*); and 3, as waxy, amyloid, or lardaceous degeneration. All three forms may be found in the same liver, or may exist independently. The last of the three forms is also produced by other cachectic conditions of the system, such as the tubercular diathesis, and the cachexia induced by intermittent fever; and is pretty generally recognised. The first two are less known.

In the bodies of persons who have suffered from constitutional syphilis, white cicatrix-like depressions, of a folded or radiated form, are often found upon the outer surface of the liver, the capsule of which is usually at the same time much thickened, and firmly adherent to the surrounding parts. Sometimes there is only a single depression; at other times, the depressions are so numerous as to give the liver an irregularly lobulated appearance. On careful examination, these depressions are found to be formed by fibrous tissue extending from the thickened capsule more or less deeply into the interior of the gland, the secreting tissue of which is atrophied. The fibrous tissue, in most cases, is dense and tendinous, and contains but few blood-vessels. The larger branches of the portal vein, bile-ducts, and hepatic veins, as a rule, remain uninvolved, except in very rare cases, where the cicatrices extend deeply into the interior of the gland. Hence this lesion is rarely the cause of either ascites or jaundice.

In the second form, the tissue of the cicatrices just described contains whitish or yellowish nodules, of a rounded form and dried appearance, usually varying in size from a linseed to a bean, but occasionally as large as a walnut. Under the microscope, these nodules are found to consist of oil-globules, granular matter, cells loaded with oil, and areolar tissue. They thus resemble in their structural characters the gummy nodules (*Gummiknoten*) which are met with in the subcutaneous areolar tissue, beneath the periosteum, in the testicle, and in other localities, in cases of constitutional syphilis.

In both these two forms of disease, the hepatic tissue intervening between the cicatrices or nodules is either normal in its character, or more commonly in a state of fatty degeneration. In many cases, also, there is a characteristic hypertrophy, resulting from enlargement of the lobules, which compensates for the loss of substance.

The implication of the liver must, in Frerichs's opinion, be classified with the phenomena of the tertiary stage of syphilis.

The symptoms which accompany the first two forms of the disease are usually so obscure that no suspicion is entertained of the liver being diseased, until the *post mortem* examination. On the other hand, the symptoms of the waxy or amyloid form are so marked that there is rarely much difficulty in forming a diagnosis. (Frerichs, *Klinik der Leber-Krankheiten*, vol. ii.)

Emboli of the Pulmonary Artery. Messrs. Trousseau and Dumontpellier have arrived at the following conclusions, as the result of a lengthened series of researches on the subject of emboli of the pulmonary artery:—

1. Fibrinous obstructions of the pulmonary artery are lesions of very common occurrence.
2. Spontaneous coagulations in the pulmonary artery, formed *in situ*, may generally be distinguished from migratory clots derived from the peripheral venous system.
3. There are thus two varieties of pulmonary coagulations—one *primary*, due to some disease of the lung, such as pneumonia, œdema, apoplexy, etc; and the other *secondary*, resulting from the migration of a peripheral venous clot.
4. Every condition of the system which causes an increased amount of fibrine in the blood is favourable to coagulation.
5. Local causes of a mechanical nature may act as determining causes.
6. Organic diseases of the heart are most influential in inducing obstructions of the pulmonary artery, partly by the general cachectic condition of the system which they induce, and partly by the mechanical obstacle which they offer to the pulmonary circulation. (*L'Union Médicale*, Dec. 13th, 1860.)

These conclusions are opposed to the opinions of Virchow, who would make all coagulations in the pulmonary artery depend upon the impaction of a clot detached from vegetations on the lining membrane of the right side of the heart, or from some part of the peripheral venous system. In the *Gazette Médicale de Paris* for January 5th, 1861, a case of obstruction of the pulmonary artery is recorded, where there were also contraction with incompetence of the mitral valve, and likewise pneumonia, pulmonary apoplexy, and œdema. Here there was every reason to believe that the obstruction was not due to the impaction of a plug. The obstruction to the circulation through the left side of the heart led to the formation of a large fibrinous clot in the left auricle, which was found adherent after death. This offered an additional obstacle to the onward progress of the blood, the result of which was, first, œdema of the lungs, and then pulmonary apoplexy. This extravasation of blood completely arrested the capillary circulation, and caused a stagnation, first in the smaller, and then in the larger arterial twigs; the clots gradually assuming a fibrinous character. Such appeared the most probable interpretation of the phenomena of the case.

Periuterine Hæmatocele. A very interesting case of periuterine hæmatocele, communicating with the intestine and the bladder, was recently reported to the Société de Biologie. The pouch of the hæmatocele filled up the greater part of the pelvic cavity, and opened directly into the bladder, and into the lower end of the ileum, about two inches above the ileo-colic valve. The patient was 18 years of age; she began to menstruate when 10 years old, and at 14 became a mother. For the last year of her life she had been a prostitute. From the symptoms and *post mortem* appearances, it appeared probable that an ovarian hæmorrhage had led to the formation of an intraperitoneal hæmatocele; and that, six months after this, the sac of the hæmatocele had become inflamed and ulcerated, and communications had been established between it and the neighbouring organs. Gas and fæcal matter were voided with the urine for some months before death. (*Gaz. Médicale*, Jan. 12th, 1861.)

Causes of Lead-Colic. As instances of the slight causes which may lead to the contamination of the system by lead, two cases are recorded in the *Bulletin Général de Thérapeutique*. In one, the patient was a manufacturer of pewter boxes for marine stores. The other patient was employed at a tea merchant's, in making bags of sheet-lead for holding tea. (*Bul. Gén. de Thér.*, Jan. 15th, 1861.) A number of analogous cases were reported some years ago by Dr. Inman, in the *Liverpool Medical Journal*.

Leukæmia with Milky Urine. An interesting case of leukæmia was lately observed at Venice by M. Namias. The patient was a man aged 40, who, without any very obvious cause, was suddenly seized with all the symptoms of peritonitis. The serum of the blood drawn from the body on two different occasions exactly resembled milk, and the urine had also a milky appearance. The blood, when treated with ether, yielded 10 per cent. of fatty matter; and, when examined microscopically, it was found to contain an immense number of white corpuscles, and but few red corpuscles, many of which last were also deformed. The patient recovered; and the blood, during convalescence, was found to be perfectly normal. Unfortunately, no mention is made of the dimensions of the spleen. (*Giornale Veneto di Scienze Mediche*, 1860.)

Transmission of Syphilis by Vaccination. M. Viennois of Lyons, as the result of a lengthened series of researches, has arrived at the conclusion that the syphilitic virus may undoubtedly be propagated by vaccination. In the first place, it should be mentioned that Messrs. Sperino and Daumés had previously shown that, when a mixture of vaccine matter and pus from a chancre was inoculated, the one virus did not destroy the other, but that each ran a distinct course. According to M. Viennois, when syphilis follows ordinary vaccination, the syphilitic virus is not contained in the vaccine matter, but in the blood of the syphilitic person, some of which has become accidentally mixed with the lymph. The vaccine matter is only a vehicle for the virus contained in the blood. When vaccination gives rise to syphilis, the vaccine pustule is always succeeded by an ulcer with indurated edges, presenting all the characters of a primary syphilitic chancre. M. Viennois confirms the law laid down by M. Rollet, that syphilis always commences with a chancre, whether it has been contracted from an individual suffering from secondary symptoms, or through the medium of the blood of a person labouring under constitutional syphilis. If M. Viennois be correct in his observations, the transmissibility of constitutional syphilis is placed beyond a doubt. (*Méd. de Paris*, Jan. 26th, 1861.)

Development of Tapeworm. By a recent experiment made upon the human subject, M. Küchenmeister has again succeeded in demonstrating that the *cysticercus cellulosæ* becomes metamorphosed into the *tænia solium* of man. A man, under sentence of death, was induced to eat some pork containing cysticerci, on Nov. 29th, 1859, and again on January 18th, 1860. The culprit was executed on March 31st, 1860; and, on *post mortem* examination, one-half of the cysticerci swallowed were found to have become converted into flat worms. Eleven tapeworms, with perfectly developed joints, were found in the intestines, the longest measuring five feet. (*Deutsche Klinik*, Dec. 1860.)

Typhus Fever in Vienna. Typhus fever is said to be at present one of the most prevalent diseases in Vienna —a fact of some importance in connexion with the comparative immunity from this scourge at present enjoyed in Britain. It would be very important to know whether the disease spoken of as typhus is really the typhus of English writers, or the *fièvre typhoide* of Louis. The prevalence of the disease in Vienna is attributed to the persistent intense cold. In our own country, it is now well known that long continued cold is wont to check the prevalence of typhoid fever; while, on the other hand, in former days, when overcrowding of the dwellings of the poor was more tolerated than at present, intensely cold weather was always followed by an increased prevalence of typhus fever in our large towns, owing to the influx of persons from the surrounding country districts leading to overcrowding. (*Wiener Medizin. Wochenschrift*, Jan. 5th, 1861.)

Hæmoptysis induced by Sulphate of Quinine. Four cases are recorded by M. Simon, to show that hæmoptysis may be induced by sulphate of quinine. The hæmoptysis coincided with the administration of the quinine, ceased when the medicine was suspended, returned when it was resumed, and again ceased when the remedy was discontinued. In none of the cases could any disease be discovered to account for the hæmoptysis. The dose of quinine varied from six to twenty-five grains in the day. (*Gaz. des Hôp.*, Jan. 1861.)

Treatment of Prurigo. During the year 1859, sixty-eight cases of prurigo were treated in Professor Hebra's clinique. Most of the patients had been under treatment for the same affection on previous occasions. The disease, according to Hebra, occurs only in poor people, who pay little attention to the state of their skin. Any measures which will soften the skin will remove the papules and itchiness. The treatment recommended is warm baths with plenty of soap, and, after each bath, rubbing into the skin an ointment composed of equal parts of cod-liver oil and tar. The itchiness almost invariably ceases after the second or third application. (*Spitals-Zeitung*, No. I, Jan. 5th, 1861.)

Treatment of Pemphigus. Hebra's treatment of pemphigus consists in laying open the bullæ, and cauterising their base with nitrate of silver; and in the administration internally of large doses of sulphate of quinine. (*Spitals-Zeitung*, No. I, Jan. 5th, 1861.)

Treatment of Zona. Dr. Hervez recommends the local application of blisters, as best calculated to alleviate the severe pains which occasionally precede and follow an eruption of shingles, and to shortan the duration of the disease. He records a case where this preventive treatment proved very successful. (*L'Union Méd.*, Jan. 17th, 1861.)

Abortive Treatment of Acute Phlebitis. M. Spoiret, chief physician to St. Mary's Hospital at St. Petersburgh, has published several very striking cases to show the good effects of the external application of tincture of iodine in arresting the progress of acute phlebitis. He ordered the tincture to be painted along the course of the inflamed vein, and over the skin for two inches on either side; while internally he administers camphor, opium, and arnica.

Treatment of Gall-Stones and of Hepatic Colic. In a case of colic resulting from the passage of gallstones, M. Vollant recommends that the patient should first be made to change his position frequently, in order to favour the descent of the calculus into the duodenum. If this plan do not succeed, absolute rest is to be enjoined; and a powder, containing one-sixth of a grain of hydrochlorate of morphia and five grains of powdered liquorice, is to be administered, and repeated after half an hour. A third powder is rarely necessary. To prevent the formation of new calculi, he agrees with Trousseau in prescribing bicarbonate of soda, from fifteen to thirty grains daily, taken in one or several doses, dissolved in decoction of taraxacum and liquorice. (*Jour. de Méd. et de Chir. Prat.*, Jan. 1861.)

Means of arresting Hiccup. Dr. Wolf has frequently succeeded, by the following plan, in arresting the hiccup which supervenes in the course of disease or under other circumstances. The patient is ordered to take a full inspiration, and to strain with the abdominal muscles as if he were at stool. He is to remain in this state, without breathing, as long as possible; and when he does breathe, to take a very rapid inspiration. The process must be repeated several times before it is successful. (*Deutsche Klinik*, 1860.)

Lithotomy in Persia. In a letter from Vienna, published in the *Edinburgh Medical Journal* for January, is an account of a paper read by Dr. Pollak, private physician to the Shah of Persia, on 158 lithotomy operations performed in Persia between November 1852 and June 1860. Dr. Pollak describes calculous disease as very common in Persia, especially in the provinces formerly known by the names of Media and Hyrcania, as well as in Azerbijan, Tabriz, Teheran, Masanderan, Ispahan, and other localities. In Persia, the disease is commonly confounded with gonorrhœa; so that a patient, on presenting himself, usually says "*Susanek darem*" (I have gonorrhœa). Dr. Pollak attributes the lithiasis to the frequent use of milk diet, especially of sour milk; and also to the immoderate eating of sour unripe fruit, and to the use of large quantities of rice. He believes that stone is less likely to occur in those who use flesh diet and drink wines containing a fair proportion of alcohol. Stone in Persia appears quite unconnected with gout or hæmorrhoids; gout is there a very rare disease. The connection of lithiasis with vegetable diet appears proved by the frequent occurrence of urinary calculi in the mountain sheep. As to race, Dr. Pollak saw four cases only among Jews and Armenians, three among children of the mixed Mongolian races, and none among Negroes. Men are more frequently affected than women; rich and poor are alike subject to the malady; but by far the greater number of cases occur in children; owing, Dr. Pollak thinks, to prolonged lactation; infants in Persia are suckled two years or even longer by the rich inhabitants. Of the 158 patients on whom he operated, 69 were between the ages of 1 and 7 years; 53 between 8 and 14; 9 between 15 and 21; 16 between 21 and 50; and 11 above 50. Occasionally there seems to be a hereditary predisposition to the disease. In 147 cases there was only one calculus in the bladder; but once there were as many as six, in two cases four, and in eight cases two stones. The lateral operation was performed in 121 cases; of whom 114 recovered and 7 died. In two cases, the wounds healed by the first intention before the end of the sixth day, and when the excisions unite by suppuration, the wound was generally healed by the fourteenth or fifteenth day. Surgical fever was rarely seen; there was never occasion to restrict the diet after the third day; and on the fourth or fifth day after the operation, children used to get up and play. Dr. Pollak ascribes his success to the following circumstances; 1. The sound constitution of the patients; 2. The operations being invariably performed in the open air, and the after-treatment being conducted either out of doors, or in a chamber with open doors and windows; 3. The absence of erysipelas; 4. Dressing the wounds with fine cotton instead of charpie; 5. His great experience in performing the operation. Most of the calculi were analysed by Professor Kletzinsky, who found them composed of uric acid, oxalates, and triple phosphates.

Iodine Pastils in Spasmodic Affections of the Bronchi. The fumes from the following pastils are highly recommended by Dr. Roumier in the treatment of bronchial diseases of a spasmodic character:—Charcoal, 15 grammes; bezoine in powder, 7 gr. 50 centigr.; balsam of tolu, 1 gr. 50 centigr.; iodine, 3 gr.; nitrate of potash, 3 gr.; mucilage of gum tragacanth q. s. These ingredients are to be well mixed, and the mass divided into thirty pastils of one gramme each. They are to be burned like ordinary pastils, and the fumes are to be inhaled with the breath. (*Journal de Méd. et de Chir. Prat.*, Jan. 1861, p. 33.)

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, February 6th, 1861.

W. Tyler Smith, M.D., President, in the Chair.

Bequest by the late Dr. Rigby. A letter from the executors of the late Dr. Rigby was read, in which it was stated that Dr. Rigby had left directions that his books on Midwifery and the Diseases of Women and Children should be given to the Obstetrical Society. In compliance with these instructions, the executors had forwarded the books in question—upwards of 220 in number—to the charge of the Honorary Secretaries. A list of these (which included the manuscript notes of lectures attended by the two Rigbys—father and son) was handed round for inspection by the Fellows.

It was moved by Dr. R. U. West, seconded by Dr. Routh, and carried unanimously,—"That the valuable collection of books on Midwifery and the Diseases of Women and Children, left to the Society by their late President, Dr. Edward Rigby, be made the nucleus of a library, to be called 'The Rigby Library,' and their sense of the value of the benefaction be duly recorded by the Council."

New Fellows. A ballot took place for the eight gentlemen proposed at the last meeting, all of whom were duly elected Fellows of the Society. The following gentlemen were proposed for election:—G. T. Gream, M.D.; A. A. F. Rasch, M.D.; Fred. Pearse, Esq.; E. S. Haviland, M.D.; J. J. Tweed, jun., Esq.; T. E. Edwards, Esq.; S. G. Sloman, Esq.; W. D. Slyman, Esq.; W. H. Kerbey, Esq.; John Tanner, Esq.; and R. Turner, Esq.

Epileptiform Convulsions in the third week of the Puerperal State. By R. U. West, M.D. In this case, after some premonitory symptoms of headache, stomach and intestinal derangement, a lying-in woman was attacked, towards the end of the second week, with frequent fits of epileptiform convulsions, which persisted throughout the third week. There was slight albuminuria and the fits were followed by more or less persistent hemiplegia, with other alarming symptoms. The patient recovered under the use of remedies directed, in the first instance, to the relief of the gastric and intestinal irritation, and, towards the decline of the disease, to the removal of the anæmic and debilitated condition which was left. The author remarked that this case, in which the patient recovered perfectly, and in which, therefore, there could not have been any cerebral mischief, notwithstanding the formidable appearance of the symptoms, showed how little we can rely on symptoms alone in forming a diagnosis in cerebral affections, especially when the case was compared with one, a report of which, by the author, was read before the Society last October, in which latter case, with less formidable symptoms, the patient died in a few hours, and serous effusion in the brain, with other cerebral disease, were found on a *post mortem* examination.

Puerperal Fever Complicated with Diphtheria: Life Saved by the Tincture of Sesquichloride of Iron. By Robert Druitt, M.R.C.P. A healthy woman aged 42, was attacked on July 7th, after labour, with shivering and violent pain in the left leg. The pain soon left the leg, and seized the left side below the mamma. There were extreme restlessness, heat of skin, and prostration. On the third day of the illness, violent fœtid diarrhœa was established. On the ninth day, the diarrhœa had continued incessantly; the motions, thin, reddish, and offensive, passed involuntarily; the patient was drowsy, wandering, and picking the bedclothes. There now came on great constriction in the throat, difficulty of swallowing, and copious salivation, together with a diphtheritic exudation at the back of the fauces. The most lavish administration of port wine, brandy, beef-tea, opiates, and quinine had failed to stay the progress of the malady; and the patient was evidently sinking, when, at the suggestion of Dr. Frere, who was called in consultation, tincture of sesquichloride of iron was given. The effect was decided. The contents of the alimentary canal were deodorised, and the diarrhœa ceased within twenty-four hours; and, spite of difficulty of swallowing and the throat-complication, the patient rapidly became convalescent. The diphtheritic exudation extended over the posterior half of the soft palate. The upper lobe of the left lung was left consolidated; but in the twelvemonth which has since elapsed it has entirely recovered its normal condition. Three fluidounces of the tincture were swallowed in five days, besides an ounce used in lavements. During the first day that it was given, the patient took two fluiddrachms every two hours. It was evident that these doses did good, and it was probable that smaller ones might have failed.

OVARIOTOMY; WITH CASES, AND REMARKS ON THE DIFFERENT STEPS OF THE OPERATION AND CAUSES OF ITS MORTALITY.

BY W. TYLER SMITH, M.D., F.R.C.P.

The paper commenced by a reference to the proposal of ovariotomy by John Hunter in 1786, and its first performance by Dr. McDowell in 1809. The author maintained the operation to be justifiable on the ground of the favourable comparison which could be made between its mortality and that of some other recognised capital operations, such as amputation of the thigh, ligature of the subclavian, and adult lithotomy; and also between the extirpation of the ovary and simple tapping, or tapping with the injection of iodine. It was shown that of 130 cases of simple tapping, 69 were dead at the end of one year, and 114 were known to have eventually died of the disease. Of 130 cases of iodine injection after tapping, 66 died or re-filled, and 64 were said to have been cured; but in these cases the nidus of the disease remained, and it might at any time recur. Of 395 cases of completed ovariotomy, 212 recovered, and 183 died; showing that, notwithstanding the acknowledged dangers of the operation, the results were more favourable than after tapping or injection. The author then detailed his own cases.

Case 1. *Monocystic Dropsy of the Left Ovary.* The tumour was very large. This patient, fifty years of age, was operated upon on October 15th, 1860, and that day four weeks she was well enough to travel to Boston in Lincolnshire. She remains in good health.

Case 2. *Polycystic Disease of the Left Ovary.* The operation was performed November 15th, 1860. The patient had been previously tapped and treated by pressure. There were extensive adhesions. She was threatened with peritonitis, but in three weeks was convalescent.

Case 3. *Monocystic Disease of the Left Ovary.* The patient was operated on December 7th, 1860. There were no adhesions. The tumour was of moderate size. She went on well, and was convalescent at the end of a fortnight.

Case 4. *Polycystic Disease of the Left Ovary of the Colloid Type.* The tumour was of large size, and combined with ascites. The operation was performed January 4th, 1861. Four months before, the patient had been delivered of a child at the full term. There were extensive adhesions. In this case the recovery was slow, but she sat up about three weeks after the operation, and is going on favourably.

The operations were performed by the short incision, the cysts being tapped and brought through the wound. The ligature was allowed to fall into the pelvis. A very moderate amount of opium was given, and stimulants were administered on the third or fourth day, in the absence of inflammatory symptoms. Great care was taken to guard the patients against any miasmatic or contagious influence. The author preferred the ligature to the clamp, on account of the straining caused by the latter in the event of vomiting or tympanitis. As far as statistics are known, the proportion of recoveries is greater when the clamp is not used.

Nearly 17 per cent. of the fatal cases have occurred from shock or collapse. This source of mortality should be met by resorting to the operation before the patient has reached a state of exhaustion. Except in cases of extensive adhesion, there is nothing necessarily belonging to the operation which should produce dangerous shock. This source of danger will be diminished when the operation becomes an established proceeding in suitable cases. Improvements in diagnosis will doubtless lessen the number of cases in which the abdomen is opened without finding ovarian tumours. Earlier operation would also lessen the number of cases in which adhesions occur.

Exactly 16 per cent. have died from hæmorrhage. This result may nearly always be prevented by care in tying the pedicle, and in arresting hæmorrhage from the separation of adhesions. The ligature should never be left until we are quite sure that all bleeding has ceased. One source of the bleeding has been the use of the ligature without transfixing the pedicle. There is a notable increase of mortality where the pedicle is tied in one mass, as compared with transfixion and tying in two or more portions.

Peritonitis is by far the most fatal complication; not less than 43 per cent. of the fatal cases have died in this way. Dr. Smith believes that peritonitis does not depend so much on anything inherent in the operation itself, as upon miasmatic or contagious influences. This seems proved by the great mortality after the operation in hospitals as compared with private practice. Peritonitis following ovariotomy is evidently in the majority of cases not simple inflammatory peritonitis, but a disease closely resembling puerperal fever. The ovariotomy patient is as susceptible as the puerperal woman, or even more so. Such cases cannot safely be collected together or mixed with other patients; and in the long-run, Dr. Smith believes, the results cannot be as favourable either in general or special hospitals as under other circumstances. In the operations detailed every possible care was taken that they should be performed under good sanitary conditions; that as few persons saw the patients or were present at the operations as could well be; and that nothing came near them in the shape of contagion or infection; and to this cause, more than anything else, Dr. Smith attributed the success of the cases. These three causes—shock, hæmorrhage, and peritonitis—represented upwards of 75 per cent. of the total deaths after ovariotomy.

Mr. Baker Brown observed that the author had mentioned two plans of treatment only—namely, tapping simply, and tapping with injection of iodine. Besides complete extirpation, there was, however, another which he (Mr. Brown) had for many years advocated, namely, tapping conjoined with pressure. This mode of treatment was only applicable to monocystic forms of the disease. He could mention many cases which had been cured by this treatment. He thought that the author had not fairly stated the advantages of tapping with injection of iodine, which in unilocular cysts has been often used with advantage. He had himself reported some cases of cure, as also did Mr. Spencer Wells about two years ago. As regarded the administration of opium after the operation, he (Mr. Brown) had been in the habit of giving opium in all cases, as had also been done by Dr. Clay, of Manchester; but latterly he had been guided in this matter by the severity of the pain. He generally gave opium by the rectum, as in many cases it does not cause the same amount of sickness as if given by the mouth. He then alluded to the length of time the ligatures had remained in the abdomen; in one case seven, in another eleven weeks. He thought that this must have arisen from one of two causes: either that they were not tied tight enough, or that too much of the peduncle had been taken up by each ligature. The average time in his experience, and in that of Mr. Lane, had been from nine to ten days. He (Mr. Brown) could not agree with the author in his exclusive use of the ligature, allowing the peduncle to drop into the abdomen. The practice that he adopted was, to use the ligature where the peduncle was very short, and could not be kept outside the opening without dragging too much upon the uterus; on the contrary, where the peduncle was long enough, he preferred securing it by clamp or otherwise on the outside, as the wound healed more quickly, and the patient was sooner convalescent. The objection to the weight of the clamp was obviated by using a pair of common carpenter's calipers. These could be generally removed on the second or third day. In reference to the sutures, he thought that when the author had tried the silver wire sutures, he would find them far better than the silk; they were more readily applied, and three or four deep ones were sufficient without the interrupted sutures. He thought that the success of the author was due in a great measure to the fact that none of his cases had been tapped, except one, and that only once.

Mr. Spencer Wells concurred with Mr. Brown in the opinion that the author had rather undervalued iodine injections in cases of single cysts. He (Mr. Wells) had employed iodine in five such cases, and four of the patients had remained without re-filling. In the fifth, the injected sac had either refilled, or others had grown. In compound cysts he quite agreed with the author in regarding iodine as worse than useless. He differed entirely from Mr. Brown in the opinion that pressure was of use after tapping. Doubtless some single cysts had remained without refilling after this treatment; but tapping alone was quite as useful without as with pressure. In two cases in which he (Mr. Wells) had been prepared to inject iodine he had trusted to simple tapping, because, in each case, he found the fluid so clear and limpid that he believed the cyst was not truly ovarian, but one of those thin-walled, simple cysts of the broad ligament which collapse when emptied, and do not fill again, whether pressure be employed or not. As to the position of the patient during ovariotomy, he had tried, in three cases, the sitting posture, but he very much preferred the recumbent position. The chloroform was less likely to induce faintness; there was less tendency to escape of intestines, greater facility in securing the peduncle or bleeding vessels; and it was not difficult, by holding the cysts well forward as they are emptied, to prevent the ovarian fluid from entering the peritoneal cavity. After using the clamp in four or five cases, he had abandoned it, except as a very convenient and rapid mode of securing the peduncle for a few minutes while the tumour is separated and the wound closed. Ligatures may then be used below it, and it may be at once removed. In the two cases of tetanus, he did not believe the clamp had anything to do with this occurrence. In one case the tetanic symptoms did not appear till the fourteenth, and in the other till the eighth, day after operation; yet the clamps came away on the third or fourth day. The objection to the fixing the peduncle to the abdominal parietes suggested by the author, that increase of the uterus during pregnancy might be interfered with, was not borne out by a case in which a patient upon whom he had so fixed the peduncle had borne a living child thirteen months after ovariotomy. He differed very strongly from the author in his practice of leaving the tied stump of the peduncle within the peritoneal cavity. The length of time occupied by the separation of the ligature when it was left inside, was a great source of anxiety to both patient and surgeon. In some recorded cases, it had remained for thirty or forty days; whereas, when fixed outside, it separated in three or four, or at most eight or ten, days, and then the wound healed, and all anxiety ceased.

Dr. Graily Hewitt agreed very much with the conclusions of the author, that in many cases the symptoms and condition of the patient in fatal cases resembled those observed in puerperal fever, and that it is of vital importance to prevent the patient from being subjected to the action of deleterious matters introduced from without during or after the operation. He believed that the reason that in the general hospitals of the metropolis the mortality after ovariotomy had been so considerable as compared with the results obtained in private practice and elsewhere, was to be found in the fact that this source of danger had been too little recognised.

Dr. Tyler Smith could assure Mr. Brown that the ligature had in each case been drawn sufficiently tight. He had not seen any great results from tapping and pressure. He had patiently and carefully tried tapping and the injection of iodine, and had been disappointed. He had not seen the evils mentioned by Mr. Spencer Wells as following the use of the ligature. He preferred the sitting, or semi-recumbent posture, because it was convenient for the operator, and it rendered the escape of blood or serum from the cavities of the abdomen and pelvis easy. This was a matter of considerable importance. He trusted others would be led to adopt the operation. For himself he could say, that in the last few months he had done more good in ovarian cases than in the whole of his previous career. He could not before this have pointed to four distinct and positive cases of cure.

Correspondence.

UNQUALIFIED ASSISTANTS.

Sir,—I wish to ask through the medium of your columns, whether any man without a qualification, can, under any circumstances, practise under a legal practitioner's name, and beyond a certain distance; and, if he can, how far that distance is supposed to extend. Perhaps, the better way to gain the information required would be to put a case in point.

A young man, having been brought up in the surgery of, and perhaps, apprenticed to, a general practitioner, after the usual term of years, continues to act, as an unqualified assistant. For certain reasons, unnecessary to be detailed, he is dismissed from the house of the medical man; and after retaining a situation for some time elsewhere, as an assistant, returns into the neighbourhood of his former master, and commences practice, without any diplomas. The Act of Parliament, passed three or four years ago, induces him to give up his illegal practice, and he obtains a situation, as assistant with another medical man, from which, after a length of time, he is dismissed. After his dismissal, he returns to his former neighbourhood, and again commences practice, under the name of a medical man residing at ten miles distance—the said medical man being duly qualified, though only acting as assistant to another.

This case having occurred in my own neighbourhood, and feeling, that, as an old member of the Association, it is my duty to suppress quackery, I shall feel obliged by any information, that may be afforded me by any of your correspondents. I am, etc.,

F.R.C.S.

Ex-President of a Branch of the Association.

February, 1861.

WET-NURSING.

LETTER FROM J. H. DAVIS, M.D.

SIR,—I shall feel obliged by your transposing the two words, *single* and *married*, in my letter of the 11th inst., as at present my sentiments are not fully expressed.

After the above correction, the sentence will read as it does in the rough copy, and as I intended it to do in your JOURNAL, thus:—

"When the physical qualifications of two candidates—a *married* and a *single* woman are equal. I should be disposed myself to prefer the former."

With regard to your implied query as to my opinion whether wet-nursing is or is not frequently resorted to without necessity, I would say that I think there can be no doubt of its being a fact, that such aid (wet-nursing) in the rearing of infants, is, and has been frequently had recourse to without the rightful indications; in circumstances, that is to say, where the mothers having had an ample supply of the natural food for their offspring, have preferred the unnatural excitements of fashionable life to the performance of their maternal and natural duties to their little ones. I trust, however, that it is a rare case that the medical attendant has given any encouragement to such a practice.

I am, etc., J. HALL DAVIS, M.D.

11, Harley Street, Cavendish Square.

WET-NURSES AND "FALLEN" WOMEN.

LETTER FROM GRAILY HEWITT, M.D.

SIR,—Mr. Acton's "serious sadness" is very much thrown away, when he supposes that the resolution of the weekly board of the British Lying-in Hospital, on the subject of "wet-nurses," and to which he alludes in your number for Feb. 16th, has any effect or operation on the unfortunate class of women whose condition he commiserates. It so happens, that the British Lying-in Hospital is a hospital for *Married* women alone. It will be necessary, consequently, for Mr. Acton to find some other cause for the increase of the crime of infanticide, which he states he has remarked in the metropolis within the last twelvemonth.

Into the abstract question of the propriety, or advisability, of employing "fallen women" as wet-nurses I do not desire to enter. I merely wish to correct Mr. Acton as to a particular fact. I am, etc.,

GRAILY HEWITT, M.D.,
Physician to the British Lying-in Hospital.

36, Berkeley Sq., Feb. 16th, 1861.

BRANDING IN THE ARMY.

LETTER FROM J. S. GAMGEE, ESQ.

SIR,—With the greatest deference for the position of Inspector General Dartnell, I confess I have read his letter in your current issue with regret, and your remarks upon it with sincere pleasure.

I cannot reconcile Mr. Dartnell's statement, that "the marking with the letter D, is not intended as a 'punishment' for the offence of desertion," with Art. 32, under courts martial, in the Queen's regulations for the army, from which I quote. "The *punishment* of marking a deserter with the letter D, (in terms of the 11th clause of the mutiny act), is to be *inflicted* on the parade, in the presence of the men, and under the personal superintendence of a medical officer." It is added, that regimental medical officers are to instruct trumpet majors, drum majors, and others, "how to apply the instrument properly *but effectually*."

When I had the honour of holding rank as a staff-surgeon of the first class, and was intrusted with the organisation of the medical service of the British Italian legion during the Russian war, I was placed in great difficulty, by an order to appoint a medical officer to brand a deserter. I wrote as follows—

"*No.* 181. *To* . . . . *Turin*, 31*st Dec.* 1855.

"SIR,—I have the honour to inform you that, since you this day intimated to me the probability of a deserter from our force having to be branded with the letter D, with the co-operation of a surgeon, I have made the communication to the majority of my staff. The result is, that I cannot hold myself responsible for the execution of the sentence; our mission is to relieve—not to inflict—pain, physical or moral. This mission we are prepared to fulfil at all risks, our lives included.

"Your suggestion, that the surgeon need not affix the iron, but teach the drum-major, or other individual, the mode of performing the operation, in no way lessens the difficulty. A medical education does not include the art of branding, and we cannot teach others what we are profoundly ignorant of ourselves.

"I have the honour to be, etc., J. S. G."

In a subsequent personal interview, I stated, that if it were intended to enforce the order, I should request permission to resign my commission. The sentence of the court-martial not having been published, nothing more was said of it; and I have never ceased to reflect with happiness, that, at least in one instance, I prevented the execution of a sentence, which, to the best of my knowledge, is consistent with the military code of no other civilised nation. We are, it is true, more sparing of life; but, happily for the dignity of human nature, many men would prefer death to the indelible brand of infamy over the left breast. I am etc.,

J. SAMPSON GAMGEE,
Surgeon to the Queen's Hospital.

20, Broad Street, Birmingham, 11th Feb., 1861.

THE TURKISH-BATH.

LETTER FROM R. WOLLASTON, M.R.C.P.

SIR,—The scattered remarks of writers on the Turkish Bath may be reduced to three main points, and to these I beg briefly to refer. They all have reference to the one leading object of the bath—the curative effects in certain diseases. What is the amount of heated air which can be safely borne? What are the chemical or physiological facts that arise from the use of heated air? What are the principal diseases that may be benefitted by the use of the bath?

To persons who have never used the baths, or who have only rarely witnessed the operation, or who are ignorant of the history of the bath as practised in the East, it may excite alarm or doubt, that a temperature of 150° or 160° Fahr., can be borne; but the fact is undoubted. Dr. Barter, who has had great experience in the use of the bath, recommends a temperature of 160° as the heat of the sudorific chamber; and he has never known of a fatal case occurring at that temperature. When I was in Constantinople, I generally took my thermometer with me, and invariably found the hot room verging about 150° or 160°. Dr. Richardson's idea that a heat of 130° is ordinarily sufficient, does not correspond with my own experience; this heat is, I believe, much too little to effect that ready and copious perspiration, which is an essential point to be gained.

In answer to the second inquiry, what are the physiological and chemical facts? I would briefly advert to the operation of heat on the organisation. After a patient has been for a quarter of an hour in the first room, at a temperature of 110° to 120°, his skin will become moist and perspiration will begin. This condition of the skin is essential, otherwise the hot air of 150° will distress him much; he ought never to go into the *hot* chamber till he is *prepared* for it, by the perspirable state of the skin. When he enters the hot room, in which a small amount of invisible vapour should always exist, (which helps much to make the skin perspire more freely, and renders the breathing easier and pleasanter than absolutely dry air could do,) he will find a very sensible change of temperature. If the room is at a suitable heat of 150° to 160°, the perspiration will gush forth freely; and the more readily and freely it does so, the inconvenience and distress of the heat will proportionally subside, the relief to the skin and lungs will be in the *ratio* of a *free secretion.* But, if the patient goes from a chamber of 100° to another of 130°, and thus gradually and slowly attains the perspirable condition, he will experience far more uneasiness from the slow process of sudorification: it is the slow development of perspiration which causes the oppressiveness of heat, its rapid development relieves the system. I have invariably found this to be the fact. I believe a heat of 130° will not fulfil what is wanted, a copious exhalation and consequent relief of the tightness and oppression of the chest and distension of the head.

While I am anxious to support the practice of a heat of 150° or 160° as necessary to produce the wished for result, I am, on the other hand, careful to guard against the adoption of temperature so high as to occasion faintness or a bursting of blood-vessels—and consequent danger. But the real efficacy of the bath does not depend on merely promoting perspiration; its influence is deeper seated. The superficial blood-vessels are fed by the lower stratum, and these again, by the main trunks of the system. A drain on the surface, gives an impetus to the whole circulation, hence arterial action is excited and venous congestions relieved. The gorged condition, of the great glands and organs, the liver, lungs, kidneys, intestines, is set free and the normal action is restored, and healthy secerning action pervades the system. With regard to the chemical changes mentioned by Dr. Thudichum, who has paid minute attention to this part of the subject, and given us the result of valuable experiments, we deduce the fact, that the functions of one organ do not vicariously perform those of another. The lungs exhale water and carbonic acid; the kidneys are the chief emunctories of the urea, the phosphates, and the sulphates; the intestines of their own special contents. The skin chiefly secretes water, holding in solution a small portion of saline ingredients, and sometimes urea, as mentioned by Dr. Goolden, in those remarkable cases of kidney disease, where the effluvium from the patient was so characteristic and offensive. In our therapeutical indications, we must never forget the utility of cathartics and diuretics, nor of the necessity of bodily exercise, whether gymnastics, peripatetics, running, or riding. If we form extravagant expectations of the Turkish bath we shall soon be disappointed, and an important agency in the cure of many diseases will be abandoned as readily as once adopted, if the operation of the bath is not placed on its true limited and legitimate basis. I need scarcely mention the diseases which may be more or less benefited by the hot air bath—but in chronic and skin diseases it is especially beneficial. Who does not regret to find, that patients are still invalids, who have been well physicked with calomel and purges, quinine and sarsaparilla, arsenic and iron, how their aches and pains still linger upon them. It was said by a witty physician of his patients—

> "I purges, bleeds, and sweats 'em,
> And if they dies. I. Lettsom."

"Hic venditur emeticum, catharticum, diureticum, et omne quod exit in um *præter remedium.*" Now the elixir vitæ is discovered; Lettsom need not despair and let them die—there is balm in Gilead, and that balm is the Turkish hot-air bath.

I cannot coincide with Dr. Richardson, that the moral or physical decay of the Turks has had anything to do with the Turkish bath—there are far more demoralising and deteriorating causes which have enervated them; Nor was the bath the destroyer of the Roman commonwealth. The illustrious Romans were never more martial, never more intellectual, than in the palmy days of the bath. Look at the proud monuments, the remains visible at this day, of the magnificent baths of Agrippa, of Caracalla, of Diocletian. and a hundred others. If the example set by the Romans and the Turks be adopted by us, and baths erected all over the kingdom, to wash clean, and purify the people, the promoters will have achieved a great work in the physical and moral improvement of their countrymen. "Cleanliness is next to godliness," wash and be clean.

I am, etc., Robt. Wollaston.

Wolverhampton, Feb., 1861.

THE MEDICAL ACT.

Letter from A. B. Steele, Esq.

Sir,—In appealing to me for practical proposals, you are, I think, asking of an individual associate, that which could be done far more effectively by a committee; nevertheless, I venture to suggest—1. That the Medical Reform Committe, if still in existence, or, if not, then the sub-committee chosen by the council of the association, should be requested to draw up, with *proper legal assistance*, an Amended Medical Act, founded upon the basis of the old act, but freed from its blunders, legal as well as grammatical.

2. That the amended act should be published in the Journal, with a view to elicit the opinions of the members.

3. That having matured their scheme, the council should lay it before the Medical Council, in the name of the Association, and urge them to bring it before Parliament.

I am not insensible to the advantages you speak of, as resulting from the passing of the Medical Act; viz., that we have "a direct, a responsible, and an authoritative means of communication with the legislature of the country," and it is just because the way is now open, that I urge the Association to avail itself of the opportunity thus afforded, of placing medical legislation upon a sound and satisfactory footing. I am, etc.,

A. B. Steele.

January 30th, 1861.

Medical News.

Royal College of Physicians of London. At the Comitia Majora Extraordinaria, held on Thursday, Feb. 14th, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine and midwifery, were duly admitted to practise physic as licentiates of the College:—

Bowes, J., Herne Bay
May, H., Longton, Staffordshire
Prior, F. J., Tewkesbury
Roberts, A., Montpelier Square, Brompton
Suffield, C. R., Harbone, Birmingham
Wheeler, H., Clifton
Williams, W., Penrhyn, near Holyhead

Apothecaries' Hall. On Thursday, February 14th, the following licentiates were admitted:—

Anniss, W. J., Devonport
Brecknell, W. H., Gateshead, Durham
Dawson, R. H., Broxholme, near Lincoln
Dickens, F. V., Manchester
Ellis, T. S., Eastington, Upton-on-Severn
Hitchman, W., Liverpool
Long, R. G., Sturminster Newton, Dorset
Richardson, T., Union Terrace, Commercial Road East
Stocker, R. C. S.
Woodman, W. B., Stonehouse, Gloucestershire

APPOINTMENTS.

Guthrie, Dr., Chemical Assistant in the University of Edinburgh, appointed Professor of Chemistry and Physics in the College of the Mauritius.

Jenner, William, M.D., appointed Physician-Extraordinary to the Queen, in the room of the late William Baly, M.D., F.R.S.

Lister, Edward, L.R.C.P.Ed., appointed Honorary Surgeon to the Dispensaries, Liverpool.

Royal Army. The following appointments have been made:—

Bicknell, Assistant-Surgeon H., 81st Foot, to be Assistant-Surgeon 84th Foot, *vice* Gregory.

Gregory, Assistant-Surgeon H. P., 84th Foot, to be Assistant-Surgeon 81st Foot, *vice* Bicknell.

Henry, Staff-Assistant-Surgeon R., to be Assistant-Surgeon 91st Foot, *vice* Marshall.

Lumsden, Assistant-Surgeon C. G., 90th Foot, to be Staff-Assistant-Surgeon, *vice* Henry.

Marshall, Assistant-Surgeon J. M'L., 91st Foot, to be Staff-Assistant-Surgeon, *vice* Spry.

M'Carthy, Staff-Assistant-Surgeon F. T., to be Assistant-Surgeon 90th Foot, *vice* Lumsden.

Muir, Deputy Inspector-General W. M., M.D., to be Inspector-General of Hospitals.

Ogilvy, J., M.D., from the 33rd Foot, to be Staff-Assistant-Surgeon, *vice* M'Carthy.

Rutherford, Staff-Surgeon W., M.D., to be Deputy Inspector-General of Hospitals.

Spry, Staff-Assistant-Surgeon G. F., to be Assistant-Surgeon 33rd Foot, *vice* Ogilvy.

Royal Navy. The following appointments have been made:—

Bennett, W. N., Esq., Assistant-Surgeon, to the *Britannia*.

Bradley, James, Esq., Acting-Assistant-Surgeon, additional, to the *Nile*.

Cameron, W. H., Esq., Surgeon, to the *Mutine*.

Redmond, Wm., Esq., Acting-Assistant-Surgeon, to the *Bacchante*.

DEATHS.

Ainger, Major, Esq., Surgeon Indian Army, at Oxford Terrace, on February 10.

Burnett, Sir William, M.D., K.C.B., F.R.S., late Director-General of the Medical Department of the Navy, aged 82, on February 16.

Harris, George H., Esq., Assistant-Surgeon 2nd West India Regiment, at Ruatan Bay Island, aged 25, on December 31, 1860.

Mackinnon, Kenneth M., M.D., in Edinburgh, aged 56, on Feb. 13.

Paul, John, M.D., of Elgin, in London, aged 68, on February 11.

*Rice, David, Esq., at Stratford-on-Avon, aged 61, on Nov. 28, 1860.

Gaeta. Typhus and dysentery, the usual scourge of armies in which sanitary science has no voice, are raging at Gaeta.

Study of Medical Psychology. A clinique for mental diseases has been established in the University of Bologna, by a decree dated December 22nd, 1860.

Cure of Ovarian Cysts by Mineral Waters. Dr. Davat has communicated to the Imperial Society of Medicine, at Lyons, that he has ascertained that the thermal springs of Aix, in Savoy, may be used with advantage in cases of cystic disease of the ovary.

The Sewing Machine. Professor Gardner, of New York, comes to the conclusion, "after six months deliberate investigation of this subject, that the sewing machine is a blessing to mankind, and especially to the female, and that without an appreciable drawback."

Influence of Pregnancy on Insanity. Dr. Tanner, in his recent work on the *Signs and Diseases of Pregnancy*, says that in his experience insanity in women is not benefited by becoming pregnant, and, that in two cases under his observation, marriage only aggravated the morbid symptoms.

Popular Study of Natural Science. Two new classes for the study respectively of botany and physiology have been added to the institution for the promotion of art, science, and literature, which has been established in connexion with the Crystal Palace. The lecturers are Dr. Dresser and Dr. Lankester.

Alleged Inhuman Conduct. A female servant who was brought to the Small-pox Hospital, where she died, had been living in a family in Kensington where there was small-pox, and when she was attacked by the disease it is stated that she was turned into the street. A statement of so grave a character requires investigation. (*Registrar General.*)

Substitutes for Quinine. The Society of Pharmacy of Paris have offered a prize of 6000 francs, to which the Minister of War will add 4000 francs, for the discovery of a substitute possessing equivalent febrifuge properties to *quinine*, or for the artificial formation of that alkali. Nine essays have been sent in, neither of which has been thought deserving of the prize, which is left open until 1st of July, 1861. (*Chemist and Druggist.*)

De Mortuis Bonum. The following resolution was passed by an American Medical Society on the occasion of the death of a member:—"Resolved, That as a practitioner of medicine, Dr. Hampton was careful, judicious, successful, a rapid thinker; of vivid imagination, in temperament active and versatile, and gifted with rare colloquial powers, he acquired a high position among medical men."

The Colouring Matter of Leaves. When leaves are extracted by alcohol a green oil is obtained, which is called *chlorophyll.* Fremy has ascertained that this consists of a *blue* and a *yellow* principle, which he has succeeded in isolating. To the blue principle he has given the name *phyllocyanine*, and to the yellow the name *phylloxanthine.* Leaves which become yellow in autumn contain only the latter. (*Chemist and Druggist.*)

Density of Ice. M. Dufour has determined this vexed question by a new method of experimenting, which is as simple as it is exact. He made a mixture of water and alcohol, of such a density that ice floated in it in equilibrium; he then determined the density of the liquid mixture; the mean of his experiments gave the number 0·9175 for the density of ice at 0°C, which is almost exactly that obtained by C. Brunner, by an entirely different method.

Poisoning from Eating Water-Hemlock. We find, from a report in the *Royal Cornwall Gazette*, that two men out of four of a boat's crew, who went on shore for water at St. Just's Creek, in Falmouth Harbour, collected and ate a quantity of water-hemlock (*Œnanthe crocata*), and, as the account runs, "fell on the beach, moaning and foaming at the mouth." Neither of them spoke from the time of the attack, and both quickly died. It is a pity that there is no medical record of this uncommon kind of poisoning.

Death of Sir William Burnett. We regret to announce the demise of this gallant officer, which took place on the 16th inst., at the advanced age of 82. The deceased was appointed a medical officer in the Navy in 1795, and appointed Physician and Inspector of Hospitals to the Mediterranean fleet in 1810; became Medical Commissioner of the Navy in 1822, and subsequently Director-General of the Medical Department of the Navy; and was Physician in ordinary to his late Majesty William IV. The deceased was present at the battles off Cape St. Vincent, at the Nile, and at Trafalgar, for which services he was made a K.C.B., and decorated with four war medals.

The Periods of Life. It is difficult to determine the exact duration of the different periods of life; they may, however, be divided as follows. The first, infancy, lasts from birth to the tenth year; the second period, from 10 to 20, is adolescence, the second infancy; the first period of youth, from 20 to 30, and the second from 30 to 40; the first period of virile age, from 40 to 55, and the second from 55 to 70. The virile period, taken altogether, is the robust period, the epoch of man's virility. The first old age commences at 70, and reaches to 85; and at 85 commences the second and last old age. (*Flourens.*)

Foreign Body in the Air-Passages. The report of the proceedings of the Rhode Island Medical Society, records the case of a lady aged twenty-eight years, who when five years old had the brass tip of one of the ribs of an umbrella slip into her windpipe. It gave much distress at the time, and during several subsequent years produced severe attacks of pneumonia. In six or seven years it became permanently fixed and ceased to annoy her. About a year before her death she began to be troubled with a severe cough, and during a violent paroxysm threw up the foreign body along with blood and purulent matter. Death followed in a few days.

An Apology for Alcohol in Disease. An American writer kindly suggests that, a partial apology for the extent to which Dr. Todd recommends the employment of stimulants in inflammatory disease, may be derived from the very general habituation of the great mass of the English people to the use of fermented or distilled drinks; which is carried, we believe, much further than the similar practice of the United States. So much is this the case, that such potations at meals seem to be considered as a matter of course; 'drink,' with very respectable writers, appearing to imply drink of that description.

Production of Intense Cold. Messieurs Loir and Drion have described a method by which many of the gases may be liquefied in considerable quantities. It depends on the cold produced by the evaporation of volatile liquids; *e.g.* by blowing a current of dry air through several tubes into about seven ounces of *ether*, a temperature of —34° F. can be obtained, by which sulphurous acid gas may be liquefied; if, now, this liquid sulphurous acid be substituted for ether, a minimum temperature of —50° F. may be obtained; and when liquid ammonia is used as the cooling agent, the thermometer sinks to —87° F. By this temperature the authors are able to liquefy carbonic acid gas under the atmospheric pressure. (*Chemist and Druggist.*)

Alcohol in Fever. Dr. Swinburne, during his charge of the Alms-House Hospital, in Philadelphia, in 1851, treated over eight hundred cases of ship fever. His treatment was alcoholics and soups. He visited the hospitals in New York, where several thousand cases were treated that year. There the mortality was twenty-five per cent., here only fifteen; there the advantages were superior; here the patients were received into shanties. The patients here received not over ten ounces per day; there they were given from sixteen to thirty-two ounces, which he believed was quite too much, and at least one reason for the increase of mortality. He was accustomed to treat pneumonia with this remedy, and had been for years. His exceptions to its use are when a man is in good health.

Alleged Ill-treatment of a Lunatic in the Worcester Asylum. Three attendants of the Worcester County Asylum have been committed for trial by the magistrates for assaulting a lunatic in the asylum. They were admitted to bail. Dr. Sherlock, on examination of M'Kenna, the lunatic, found that his breast-bone was broken, and one rib detached therefrom and also from its cartilage, making a depression into which the hand freely entered. This was on the left side. Another rib was broken on the right side, and he believed another on the left side. There were four fractures of the ribs besides the breast-bone, and he believed there were others; but, on account of the exhausted state of M'Kenna, he did not pursue the examination further, but gave directions to Dr. Hunt to attend him. There were a number of bruises upon the chest. It appears doubtful whether the man will recover from the injuries inflicted on him. The three attendants, it is worthy of note, have the character of being humane and steady men.

Manna. The *Alhagi maurorum*, D.C., is a thorny shrub belonging to the natural order Leguminosæ. The manna exudes upon the leaves and branches in the form of small semi-fluid drops, which become hardened by the action of the air. The inhabitants collect these exudations, and make them into loaves or cakes. These are of a greenish-yellow colour at first, but they soon become black, owing to a kind of fermentation produced by the influence of the air and moisture. Little care is bestowed upon the collection of the manna, and hence it is always mixed with a large proportion of broken leaves and branches, by which its value is diminished. The odour of these manna loaves or cakes resembles that of senna; in taste, also, they resemble senna, combined with sweetness. These two characters would lead us to suppose that this manna is more purgative than nutritive. The manna should be collected, according to the statements of travellers, in the morning, as the rays of the sun cause its liquefaction. It is not produced indifferently in all localities, because its production only takes place under certain conditions of vegetation, which are only commonly met with in limited areas. Some authors, as Hallé and Guillemin, supposed that this manna of the *Alhagi maurorum* was that which constituted the manna of the Hebrews; but, at the present day, it is more generally supposed that the *Lecanora affinis*, Everem, was the substance upon which the Israelites fed in the wilderness. (M. Soubeiran in *Gazette Médicale* and *Phar. Jour.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.......	Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday.	Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday...	St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....	St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.
Friday.	Westminster Ophthalmic, 1·30 p.m.
Saturday.....	St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 8·30 p.m.: Dr. B. W. Richardson, Lettsomian Lecture.—Royal Geographical.

Tuesday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Royal Medical and Chirurgical, 8·30 p.m.—Zoological.

Wednesday. Royal College of Physicians, 4 p.m.: Dr. Guy, Croonian Lecture.—Society of Arts.—Royal Society of Literature.

Thursday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Royal Society.—Antiquarian Society.

Friday. Royal College of Physicians, 4 p.m.: Dr. Guy, Croonian Lecture.—Royal Medical and Chirurgical (Anniversary), 8 p.m.—Western Medical and Surgical, 8 p.m.—Royal Institution.—Archæological Institute.

Saturday. Army Medical, 7.30 p.m.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—February 16th, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....................	Boys .. 889 Girls.. 903	1792	1328
Average of corresponding weeks 1851-60		1747	1345

Barometer:
Highest (Sun.) 30.017; lowest (Fri.) 29.513; mean 29.697.

Thermometer:
Highest in sun—extremes (Mon.) 93.5 degrees; (Fri.) 54 degrees.
In shade—highest (Sat.) 53.3 degrees; lowest (Tu.) 24.4 degrees.
Mean—37.6 degrees; difference from mean of 43 yrs.—0.7 degs.
Range—during week, 28.9 degrees; mean daily, 12.2 degrees.

Mean humidity of air (*saturation*=100) 89.

Mean direction of wind, var.—Rain in inches, 0.22.

TO CORRESPONDENTS.

⁂ *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

Cold Damp Hands.—"Sir: Would some of your physiological readers tell me the philosophy of 'cold damp hands.' It is evidently condensation of what is called insensible perspiration, and has its origin, probably, in feeble arterial circulation—if so, what is required? I rather think that they who know why will not trouble themselves to inform what is called a 'professional brother,' as I consider such fraternal affection is by no means epidemic or endemic. Yours respectfully, Verax."

Dr. Mitchell.—Our attention has been called to the following advertisement in the *Manchester Examiner*:—

> "*New Cure for Deafness.*—We beg to call the attention of our readers to a small work on deafness, by Dr. Mitchell, of Liverpool, *being the substance of a communication made by him to the British Medical Association.* The treatment is novel and ingenious, and in cases fitted for its employment has been eminently successful. It has also the advantage of being perfectly free from danger, or any formidable operation. The author has proved that in a great many cases, which have been said to be nervous, the deafness proceeds from a thickening of the membrane covering the drum of the ear, and by a peculiar treatment Dr. Mitchell removes the thickening, and enables the membrane to vibrate freely again. In true nervous cases, so long considered incurable, considerable relief has been afforded by the means employed, and we strongly recommend those interested to peruse the book.—[Advt.]"

If the gentleman referred to in it is a member of the British Medical Association, we trust that he will take the earliest opportunity of repudiating any connexion with such a proclamation.

G. M.—A correspondent inquires concerning the mode of carrying out the purification of gas according to Mr. Bowditch's plan. We are not aware that Mr. Bowditch's method has yet been taken in hand by any practical fitter-up of apparatus for the purpose. All particulars, however, on the subject will doubtless be found in Mr. Bowditch's work, entitled *A Discourse on Coal Gas*, by the Rev. W. R. Bowditch, published by Van Voorst, of Paternoster-row.

The Opinion of a Board of Guardians of the Qualification of a F.R.C.S.—Sir: I am a surgeon to a dispensary in a rural district, which is attended annually by 600 or 700 patients. To a patient entitled to receive it, I recently recommended that extra relief, in the shape of meat, should be allowed by the Board of Guardians. Although I am a F.R.C.S.Eng., and registered under the Medical Act, and this was a purely surgical case, the Board refused to attend to my recommendation, *solely because* I was not *also* a L.A.S. Were the Guardians justified in refusing, on these grounds, to grant the extra relief recommended?

I am, etc., I. H. R.

East Sussex, Feb. 16, 1861.

[We believe that the Guardians of the Poor are not obliged to attend to the orders of any medical man excepting those of their own appointment. If they do so on any occasions, it must be, so to say, as an act of courtesy. Any sick person receiving relief from the parish must, according to the Poor-law theory, receive it through the medium of the Poor-law officials—the relieving-officer and union medical attendant. The refusal to give extra relief on the order of a Fellow of the College of Surgeons in a surgical case, because the Fellow was not an apothecary also, must have been simply a pretence for not giving the relief at all. One can hardly suppose a Board of Guardians so utterly ignorant of the high professional *status* of a Fellow of the College of Surgeons, as to fancy that he requires to be a Licentiate of Apothecaries' Hall in order to treat a surgical case effectually.—Editor.]

Mr. Dayman.—Let us hope that the lesson already read to the coroner may not be without some benefit *in futuro*. Further reflection will probably open his eyes to the absurdity of the position he assumed on the occasion referred to.

Mr. Appleton.—Could not our correspondent obtain from the medical attendants a professional account of the interesting and rare cases he refers to?

Duties of Medical Officers of Public Charities.—Sir: Will you kindly allow me to put the question of your correspondent A. F. in another form, and ask your opinion upon it? Is it etiquette for the medical officer of a charity to *visit*, prescribe for, and furnish medicine to a pauper patient, without the knowledge or consent of the Poor-law medical officer in attendance on the case? I am, etc., W. W.

[We should say, certainly not, providing the medical officer of the charity was aware that the Poor-law medical officer was in attendance on the pauper patient.—Editor.]

BRITISH MEDICAL ASSOCIATION.

Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members of the Association, shall be admitted a member at any time by the Committee of Council, or by the Council of any branch. The subscription is One Guinea annually, due on January 1st; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year.

Gentlemen wishing to join the Association are recommended to communicate with the General Secretary, Dr. Williams, Worcester; or with either of the following officers of the District Branches: *Bath and Bristol Branch—President*, John Soden, Esq., Bath: *Hon. Secs.*, R. S. Fowler, Esq., Bath; H. Ormerod, Esq., Bristol: *Birmingham and Midland Counties—Pres.*, E. Moore, Esq., Halesowen: *Hon. Sec.*, O. Pemberton, Esq., Birmingham: *Cambridge and Huntingdon—Pres.*, Dr. G. E. Paget, Cambridge; *Hon. Sec.*, Dr. Humphry, F.R.S., Cambridge: *East Anglian* (Norfolk, Suffolk, and Essex)—*Pres.*, R. Faircloth, Esq., Newmarket; *Hon. Secs.*, Dr. Chevallier, Ipswich; Dr. Pitt, Norwich: *East York and North Lincoln—Pres.*, W. H. Eddie, Esq., Barton-on-Humber; *Hon. Sec.*, Dr. H. Munroe, Hull: *Lancashire and Cheshire—Pres.*, Dr. M. A. Eason Wilkinson, Manchester; *Hon. Secs.*, Dr. A. T. H. Waters, Hope Street, Liverpool; J. M. Robinson, Esq., Bolton; J. Sharp, Esq., Warrington; Dr. J. Thorburn, Manchester: *Metropolitan Counties—Pres.*, J. Birkett, Esq., 59, Green Street, Grosvenor Square; *Hon. Secs.*, Dr. A. P. Stewart, 74, Grosvenor Street; Dr. A. Henry, 15, George Street, Portman Square: *Midland—Pres.*, G. E. Stanger, Esq., Nottingham; *Hon. Secs.*, Dr. Goode, Derby; H. Lankester, Esq., Leicester; Dr. Mitchinson, Lincoln; Joseph White, Esq., Nottingham: *North Wales—Pres.*, Dr. Turnour, Denbigh; *Hon. Sec.*, D. K. Jones, Esq., Beaumaris: *Reading—Pres.*, Dr. Woodhouse, Reading; *Hon. Sec.*, G. May, jun., Esq., Reading: *Shropshire (Ethical)—Pres.*, H. Fenton, Esq., Shrewsbury; *Hon. Sec.*, Dr. Styrap, Shrewsbury: *Shropshire (Scientific)—Pres.*, Dr. H. Johnson, Shrewsbury; *Hon. Sec.*, S. Wood, Esq., Shrewsbury: *South-Eastern* (Kent, Surrey, and Sussex)—*Pres.*, F. Fry, Esq., Maidstone; *Hon. Sec.*, P. Martin, Esq., Reigate; *Hon. Sec. Rochester, etc., district*, Dr. Dulvey, Brompton, Chatham: *South-Midland* (Beds, Northamp-ton, and Bucks)—*Pres.*, Dr. Barker, Bedford; *Hon. Secs.*, Dr. Bryan, Northampton; R. C. Hurst, Esq., Bedford: *South-Western* (Devon and Cornwall)—*Pres.*, Dr. Hall, Torquay; *Hon. Sec.*, C. H. Roper, Esq., Exeter: *Hon. Secs., Cornwall district*, Dr. Littleton, Saltash, Plymouth; R. Q. Couch, Esq., Penzance: *West Somerset—Pres.*, John Prankerd, Esq., Langport; *Hon. Sec.*, Dr. W. E. Gillett, Taunton: *Yorkshire—Pres.*, W. Favell, Esq., Sheffield; *Hon. Sec.*, G. Hornby, Esq., York.

COMMUNICATIONS have been received from:—Mr. R. C. Hurst; Mr. C. H. Cornish; Mr. P. C. Price; Mr. W. Jackson; Dr. Lister; Mr. J. C. S. Jennings; Dr. Beale; Dr. Grailey Hewitt; Mr. Jennings; Mr. Rogers; Mr. Martin; Mr. Dayman; Dr. T. K. Chambers; Mr. Hutchinson; Mr. Nunneley; Dr. Sandwith; Dr. S. Felce; Mr. T. Mellor; and An Old Member of the West Somerset Branch.

BOOKS RECEIVED.

1. Course of Lectures on the Physiology and Pathology of the Central Nervous System. Delivered at the Royal College of Surgeons of England in May 1858. By *C. E. Brown-Séquard, M.D., F.R.S. London: Williams and Norgate. 1860.
2. The History of Medicine: Comprising a Narrative of its Progress from the Earliest Ages to the Present Time. By *Edward Meryon, M.D., F.G.S. Volume I. London: Longman and Co. 1861.

ADVERTISEMENTS.

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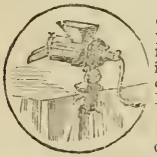

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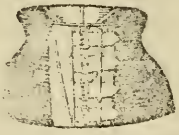

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The Metropolitan Members of the Committee, with the Trustees, are responsible for all moneys received by the staff.

Clinical Lecture

ON THE

USE OF POTASSA FUSA IN THE TREATMENT OF STRICTURE OF THE URETHRA.

DELIVERED AT THE MIDDLESEX HOSPITAL.

BY

CAMPBELL DE MORGAN, Esq.

Gentlemen,—You have recently had an opportunity of seeing the effects of a mode of treatment of stricture of the urethra, which does not appear to me to have had that attention given to it which I believe it merits.

The man, Patrick Archibald, whose case I propose now shortly to read to you, was a tailor, aged 44, who was admitted into Forbes' ward on December 4th last. He had been a hard liver; but until lately had had good health, except that he was subject to occasional attacks of rheumatism. Within the last month, he has had a troublesome harsh cough, and has been losing flesh. It was ascertained, after his admission, that he had tubercles in the lungs. Ten years ago he had gonorrhœa, but he soon got well, and is not aware of ill effects from it.

About two years ago, he found that he could not at all times retain his urine. It passed from him involuntarily and spasmodically immediately on his feeling a call to micturate. At the same time the stream began to diminish; and it continued to do so until about three months ago, when he found that he could pass urine only in drops. From the first, he had severe and forcing pain in passing his urine. The desire to do so was almost constant; and for some weeks his rest has been completely broken by it. In the course of the twenty-four hours, he voided an average quantity, which was of specific gravity 1015; was slightly acid; and contained no albumen; and no more than the usual amount of mucus. There was no hardness nor tenderness in the perinæum. On passing a bougie into the urethra, a stricture was found near the membranous part. Attempts were made to introduce the finest instrument into the stricture, but without success. He did not experience much pain from the contact of the instruments; nor did any bleeding take place. The stricture seemed very hard and resisting.

On the 6th, a piece of potassa fusa, of about the size of a large pin's head, was passed down to the stricture by means of a large bougie hollowed at the extremity to receive it. This gave rise to considerable pain, especially when urine passed. This pain, save when he tried to urinate, ceased by the following morning. For nearly forty-eight hours there was no difference in the way in which the urine flowed; it came in drops; but then he began to pass a small stream, ending in drops, and with still some scalding.

On the 10th, the potassa fusa was again applied in the same manner. He had pain as before; but soon afterwards the stream enlarged, and he began to retain his urine for a longer period.

On the 17th, a No. 2 catheter was passed readily into the bladder; and then catheters were introduced one after another till a No. 8 was passed. The urine now came away always in a stream, without any tendency to its passing in drops, though he still had some pain. He now got rest at night, and said that he was in every way more comfortable, except from his cough, which was more harassing.

On the 27th, a middle sized catheter was again passed, but it was obstructed at the upper part of the stricture, and it required to be depressed, in order to guide it through. A small piece of the potassa fusa was therefore again applied; the hollow for its reception being made in the upper part of the bougie, so as to touch the upper margin of the stricture. The pain was the same as before and there was some scalding for three or four days after which, he had no pain whatever. From the time of this last application no further interference was called for. The stream became free, and from day to day he had less trouble, so that after about ten days he passed a larger stream than he had done for two years, and could hold his urine for many hours; he was indeed scarcely disturbed at night. Every day he seemed to be gaining ground, so far as the urinary organs were concerned, up to the time of his death, which took place on February 1st, the symptoms of phthisis having made rapid progress during the intensely cold weather.

On examining the urethra after death, there appeared to be but a very small amount of destruction of tissue, considering that the caustic had been applied three times.

Mr. Flower, who made a careful examination of the parts, has kindly furnished me with the following note of the appearances. "On the floor and right wall of the bulbous portion of the urethra, two inches from the neck of the bladder, is a nearly circular patch rather less than half an inch in diameter, covered by a yellowish grey pellicle of sloughy tissue. Upon detaching this, a depression is left, extending in the centre almost through the thickness of the mucous membrane. Around the circumference cicatrisation is advancing; the reproduced tissue having a white, smooth, glistening appearance, and blending insensibly at its edges with the normal membrane.

"Several smooth shining patches on other parts of the lining membrane in the same portion of the urethra seem to indicate that a healing action has taken place, but there is no contraction or puckering; the coats are nowhere abnormally thickened, nor is there any fibrinous deposit beneath them; the surrounding spongy tissue appears to be quite healthy."

This case, you will observe, is one of simple permanent stricture; very narrow, certainly, insomuch that the patient could not pass a stream, however small. But, at the same time, he was free from any great amount of distress; there was no irritation of the bladder, no tendency to spasmodic retention, and no recognisable disease of the kidneys. There was then no immediate or urgent necessity for any heroic measures; nor should I have adopted the course which I did, had I not been satisfied by experience that, when carefully applied, the caustic potash is a safe as well as a rapid agent in removing a stricture. The stricture was extremely small; I could not get a fine instrument into it; and perhaps lengthened and repeated trials would have been necessary before I could have succeeded in doing so. The attempt would probably have caused irritation, and might thus have complicated the case; for, unless a bougie pass the stricture, it is often productive of irritation. Had a bougie been passed, there is no doubt that dilatation might have been easily effected. The stricture was limited to a small segment of the membranous part, and there was no hardness to be felt in the perinæum. I was satisfied, however, that not only a more rapid, but a more permanent relief, would be obtained by the application of the caustic, than by any mode of using the bougie alone; while any more decisive measures were entirely uncalled for, and would have been improper.

The patient had all the indications of phthisis;

and on that account, again, it was perhaps desirable to free him from his trouble in the urinary organs as promptly and with as little irritation as possible. The case can hardly be regarded as one which shows most strikingly the effects of the treatment; but you have not perhaps seen the caustic applied, and it is worth bringing to your notice in connexion with the general question of the treatment of stricture.

The treatment of stricture by caustics, in one form or another, is of long standing. In this country, the nitrate of silver was brought into general notice as a means of destroying stricture by Sir E. Home, who had seen it advantageously used by Mr. Hunter. There is no doubt that many cases of obstinate stricture were cured by it; but its use has become restricted to those in which there is a very irritable state of the membrane; and in such cases the lunar caustic acts as it does when applied to any other irritable surface; it deadens the sensibility. Its escharotic power is not, however, very decided. You have often seen it applied freely even to the conjunctiva, without its destroying the surface of the membrane. When it does act as an escharotic, it gives rise to swelling and inflammation of the surrounding parts. Its use as a destructive agent on the diseased tissues has been generally abandoned.

Mr. Whately first suggested the application of potassa fusa as a means of removing stricture. He only allowed of its use, however, in those cases where a fine bougie could be passed fairly through the stricture. Where this could not be done, he thought that the application of the caustic might set up inflammation, and so, by diminishing still more the aperture, cause a complete retention. The small quantity of the caustic which he used, and the precautions which he thought it desirable to adopt in order to prevent its too free action, made it in his hands a far less effective agent than it has since proved to be.

It is to Mr. Wade that we are indebted for a more just appreciation of the value of this remedy, and I would strongly recommend you to read his views on the subject. He pointed out the true distinction between the action of lunar caustic and that of the caustic alkali. The lunar caustic, he observes, gives rise to a hard slough, and to the effusion of lymph around it; while the potassa fusa effects a softening and dissolution of the thickened tissue, without producing any surrounding hardness. There is little risk, therefore, of causing that blocking up of the stricture which was feared by Mr. Whately. Mr. Wade also uses the caustic in larger quantity, and does not cover it with lard, as was recommended by that gentleman. He applies it to cases of impermeable stricture, whether those of merely a small cord-like constriction, or where the canal is indurated to a considerable extent; and he expresses his belief that, in cases so treated, there is but small disposition to a return of the disease. The last mentioned point is one of great importance, and, if the opinion be correct, would, *cæteris paribus*, render this mode of treatment preferable to most others.

As a general rule, if an instrument can be passed through a stricture, the cure is half effected. The careful gradual use of the bougie will cause the dilatation of the stricture; and, where no untoward symptom is present, such as great irritability or tendency to spasm, this is undoubtedly the best and safest mode of dealing with the complaint. But, in the majority of such cases, the bougie must be regularly used from time to time after the stricture has been dilated; for, when once a stricture has formed, there is usually a great disposition to its return. This is, no doubt, often the result of constitutional causes; the gouty constitution, or chronic dyspepsia, will keep it up. So, too, will local causes—a persistent irritable state of the bladder, or hard horse-exercise. Very frequently, however, the patient cannot give up the time required for this gradual dilatation; and frequently also the stricture will not yield to this plan of treatment. In other cases, again, the urethra seems to resent the contact of the instrument; irritation is set up whenever it is used, or the tendency to spasm is increased after it is withdrawn. In all such cases, the surgeon must resort to other modes of dealing with the stricture. Many plans of treatment have been adopted, suitable to the various complications which may exist, or to the necessities of the patient. Forced catheterism; the dilators of M. Perrève, which have been introduced into this country by Mr. Holt, and which I have used in some cases with great benefit; the dilators of Mr. Wakley; perinæal section, or intra-urethral section, and other methods,—have been put in practice with more or less success; the constitutional condition of the patient being, of course, attended to. But the disposition to return is perhaps even greater in these cases than in the more simple states of the disease. Does the removal of the stricture by potassa fusa give a better chance of permanent relief? I believe it does; and, irrespective of the cases reported by Mr. Wade, which are entirely satisfactory, my belief is founded partly on theoretical grounds, partly on my own experience.

I have often pointed out to you the peculiar appearance of the cicatrix left after the healing of a deep issue made by the caustic potash. Instead of being puckered and hard, as you generally see in the cicatrices which follow the total or partial destruction of the skin by the application of the actual cautery or by most escharotics, it is soft, and smooth, and glistening, as large as the portion of the skin originally destroyed, and merging almost insensibly into the sound tissue. My friend Mr. Hoffman of Margate some years ago told me of the benefit which may be obtained by destroying the unsightly puckered scars which are left after the suppuration of scrofulous glands of the neck, with this caustic. When the sore produced by the falling of the eschar has healed, you find that you have substituted a smooth even surface for the previous seamed and corded one. In the course of time, the new tissue regains so natural an appearance as to escape notice. This plan I have often put in practice, and with excellent results. The same effect is, I believe, produced in the urethra when the diseased hardened tissue has been thus removed: a smooth surface is left, with little or no disposition to contract; and a more permanent cure is effected than is usually produced by the bougie. The *post mortem* examination allowed us in the present case to see the condition of the parts recently acted on by the caustic; and you will observe how completely, so far as they go, the appearances correspond with those which attend the healing of an issue made with the same caustic; and how very slight is the disposition to the effusion of any plastic materials.

The first case on which I tried the caustic, now some years ago, gave me a very favourable idea of the benefit to be derived from this plan of treatment.

A strong-built middle-aged man, who had been a sailor, and afterwards a cobbler, had injured his perinæum while serving in the navy. I presume, from his account, that extravasation of blood to some extent had taken place. Stricture began to form, for which he was treated by bougies, but with only temporary relief. The last time he had been under a surgeon's hands, no instrument could be introduced into the bladder. He progressively got worse, notwithstanding any temporary benefit he may have derived from treatment. When he came to the hospital, he was suffering from constant desire to pass his urine, which only dribbled from him. The urethra could be felt in the perinæum hard and corded for at least an inch in length; the attempt to pass a catheter brought on severe spasm, and was followed often by rigors. The necessity for speedily relieving this state of things was evident; and I determined to use the caustic potash, rather, I believe, with the view of removing the extreme irritability, than of destroying the stricture. The caustic was applied in the manner recommended by Mr. Wade, and as you saw in the present case. The bougie was kept pressed against the stricture for about thirty seconds; and the operation gave rise to very little pain—less, certainly, than the unarmed bougie had caused. As in the present case, it was found that, in the course of a day or two, he was far more comfortable; he had less difficulty in passing his urine, and less urgency. No unpleasant symptom followed the use of the caustic. I determined, therefore, to repeat the application; and this was done at the end of a week, with increased benefit. After two more applications, the urine came away in a good stream; and a large bougie was passed without any difficulty into the bladder. I believe that strictures produced by mechanical violence are amongst the most obstinate of those with which we have to deal; but I have seen this man twice since; the last time was four years after the treatment by the caustic. On both occasions he had some spasmodic irritation, after too free living; but a full sized bougie could be passed easily and at once into the bladder. I have no doubt that he would have returned, had he again suffered from his complaint.

My experience of this case led me to use the caustic in others, and, so far as I know, with the same results. In two cases, certainly, the canal has remained for over two years free from contraction; others I have lost sight of. In no instance have I found any bad effect to follow the application.

The same plan has been tried by my colleagues Mr. Moore and Mr. Henry, and they are equally satisfied with the results. Mr. Henry has been so good as to furnish me with the following case, in which great benefit was obtained.

Thomas Leeks, aged 38, a sailor, was admitted into Pepys' Ward on May 10th, 1860, with an impermeable stricture at the membranous part of the urethra. Symptoms of stricture had existed for fifteen years, but latterly had increased so much that the urine was voided only in drops and with much pain. The urethra was found to be very irritable, bleeding on the slightest touch; and shivering followed any prolonged effort to pass the bougie. Quinine was of much service at these times. After about a month, potassa fusa was used twice, the bits each time being small. A little soreness was complained of for some days; and the glairy discharge common in stricture became thicker and pus-like. At the beginning of July, Mr Holt's dilator could be introduced, and dilatation up to the full extent was at once practised. No ill effect followed; and, after a few days rest, a No. 12 catheter could be passed with ease. The patient was seen recently, quite well, and has gone to sea.

Nor is it only in obstinate strictures that the caustic acts favourably. Mr. Parker, of the Queen's Hospital, Birmingham (see British Medical Journal, 1859), reports two cases of spasmodic retention of urine, consequent on stricture, which were at once relieved by its application. In these cases, it seemed to act primarily much after the manner of nitrate of silver, by destroying the irritability of the surface.

There is surely no need to insist on the necessity for great care and caution in the use of such a powerful agent; but the same care is required in the use of the bougie, and far greater in the operations with cutting instruments. Probably more damage has been done by the incautious use of the bougie than has even been produced by the caustic. My own impression is, that the caustic acts with greater effect on the hard semi-organised tissue which forms the stricture, than on the healthy vascular parts. I ground this impression on what I have observed of the action of the potassa fusa on cicatrices in other parts.

It is only fair to tell you that the treatment of stricture by caustic has been condemned by many good surgeons, both British and continental; indeed, in France its use is almost unknown. Nélaton, for example, states that cauterisation is now rarely employed, in consequence of the uncertainty of its action; of the swelling of the urethra and retention of urine, which often result from it; and of the deposit of the retractile tissue which is formed afterwards, and which ultimately produces a new impediment. Here I have no doubt he is associating the effects of nitrate of silver with those of caustic potash—effects which, as I have stated, are very opposite. I have certainly seen no such effects, nor any tendency to them; and this is the conclusion at which Mr. Wade, with more extended experience, has arrived. I cannot help thinking, with that gentleman, that the treatment has been condemned rather from want of experience of its effects than from experience of its dangers. For a more complete exposition of these effects, and of the mode of applying the treatment, I must refer you to his works on the subject.

Reduction of Paraphimosis. M. Massart advises in simple paraphimosis, without strong constriction or danger of strangulation, frictions with mercurial ointment containing a little extract of belladonna. He especially approves of the following method proposed by Professor Pinilla. He takes a narrow band; for instance, the red bandage used by bleeders. It is placed on the centre of the corona glandis, and it is turned round it by the extremities which meet and cross each other at the top of the frænum. The ends are fixed in unrolling by the little finger of each hand. Then turning into the palm of the hand the little and ring fingers, and drawing on the band, we compress the glands. At the same time the other fingers are at liberty to effect the reduction. (*Dublin Medical Press.*) [M. Massart's idea is not very novel. In the Journal for September 1st, 1860, we noticed a similar plan recommended by Dr. Van Dommellin; who, however, uses adhesive plaster. A proceeding very analogous in its nature for the removal of rings from swollen fingers was described in the British Medical Journal for July 9th, 1859, by Mr. Garraway, of Faversham; who, however, distinctly disclaimed all pretensions to originality.]

Original Communications.

THE USE OF STIMULANTS IN PNEUMONIA.

By J. Russell, M.D., Physician to the Birmingham General Hospital.

(*Read to a Private Society in Birmingham.*)

In introducing to the notice of the Society the subject which I have chosen for our discussion this evening, my design is to endeavour to demonstrate the great value of stimulants in the treatment of pneumonia, and to advocate their fearless administration, in doses proportioned to the apparent necessities of the particular case; extending my advocacy to the freest employment of brandy, even in hourly doses, whenever the bodily powers are suffering under a state of great and unusual depression.

But, in pursuing this design, I would strictly confine the cases to which I apply this treatment to one particular class: to that, namely, of low or asthenic pneumonia. I would strongly oppose the indiscriminate use of stimulants *in all forms* of the disease, as a matter of routine. I think that the stimulant treatment will suffer in public estimation, if adopted beyond the limits which I have ventured to prescribe, and will often be unjustly exposed to the discredit of producing effects not properly belonging to it. On the contrary, I would maintain that our practice in this respect must be regulated by the circumstances presented to us, and that we shall often meet with cases of pneumonia in which there is no indication for stimulating, in which, therefore, the use of stimulants would be positively injurious; and I would urge that careful discrimination must be exercised before we arrive at a decision, whether to employ a stimulating or a depressing plan of treatment; or whether even to leave the patient to the unaided power of nature.

I must, therefore, beg to say that I do not at all depend on stimulants as a cure for inflammation. On the contrary, I dislike to hear of the "stimulant treatment" of any disease—if that term be understood to mean that stimulants are to be regarded as the recognised and established remedy for *all cases* of such disease. I regard stimulants as being calculated simply to meet a special emergency which may arise in any case, and to be inapplicable unless such emergency present itself; and I believe that the strength and quantity of the stimulants employed must be adapted to the particular emergency. Even in typhoid or typhus fever, diseases which most frequently demand the energetic employment of the remedies in question, there are some cases which never require a stimulant from first to last, and others in which a very moderate quantity fully answers the requirements of the case.

Nor can I regard a case of inflammation as being one which must necessarily run its course—which, therefore, we have only to watch, confining our efforts to attending to the patient's strength, and fortifying it for the inevitable struggle. I cannot think that we should venture to treat a case of *true* croup on this principle; on the contrary, I should rest my hope of saving my patient by "cutting short" the attack in its early stages. And so in pneumonia, as it appears to me, it will be our duty to arrest the disease as soon as possible by tartar emetic; even by a bleeding, if the case admit of such a measure; and the only legitimate ground of debate, in reference to the question of depressing or of stimulating, consists in the opinion we entertain as to the amount of constitutional power residing in our patient; this inquiry, if I mistake not, will have to be made in every case, and, possibly, in every case a somewhat different reply will be given.

Pneumonia appears to have been chosen by common consent as the ground on which pathologists may fight the battle of inflammation; on which they may contest their opinions as to its nature, and especially as to its treatment. Hence, it seems to be generally understood that our verdict respecting the disputed point of stimulating in this disease, will rule our conduct in relation to the other individuals of the same class of disease.

It is, I believe, to Dr. Todd that we are indebted for the general attention which this subject has received at the hands of the medical public; for, although it is certain that stimulants were prescribed in pneumonia by individual practitioners quite as largely as by that eminent physician, yet, until he announced his views upon the subject, the question does not appear to have received so large a share of attention as it does at the present time. I must beg to say, that I have only a very general acquaintance with the opinions entertained by my late respected teacher, and that such acquaintance has been gained only at second hand; I must not, therefore, be supposed to refer to his views beyond their most general application, either in the way of assent or of denial. I wish to place the subject, so far as I am able, on a footing of ordinary pathological reasoning, and not under the authority of any pathologist, however eminent he may be.

Now I think there can be no doubt that disease, at the present day, does not endure depleting, or even depressing treatment, to the same extent as in former days. Whatever theory we may hold on the subject, the fact is undeniable, that venesection is seldom practised now, at least in large towns. I well remember that, when I was a dresser at the General Hospital, two or three and twenty years ago, it was very common for persons to apply at the surgery to be bled for some supposed ailment; and that "VS." was regarded as being an item in the day's "casualties," as much a matter of course as was "DE." At present such an application is quite unknown. Although such applications were indeed extra-professional, they nevertheless afforded a fair indication of the direction taken by medical practice. Again, with regard to tartar emetic; the larger number of cases in which mercury is preferred in the treatment of pneumonia, even by those who do not stimulate largely, seems to me a further argument in favour of the opinion that the present type of pneumonia is of a lower character.

I think I may go further, and say that, in this town at least, we seldom hear of the employment of tartar emetic in the large doses originally prescribed by Rasori, and administered, as a habit, when I was a student; or that, if prescribed at the commencement of the case, they are speedily and necessarily reduced.

Nothing is more striking in reading the works of the highest authorities, written some thirty years ago, than to observe the freedom with which the lancet was employed; so it was by Abercrombie, in all forms of diseases of the brain; so it was by Andral, in the same class of maladies; and although, in reading Andral's fifth volume, we recognise in some of his cases the mischievous consequences of large depletion (in the gradually increasing dulness or delirium, ending finally in coma and death, without the discovery of any *post mortem* appearances to explain the symptoms observed), we cannot avoid the conviction that some good reason must have existed for the institution of a practice so generally adopted, albeit carried sometimes to a disastrous excess. Indeed, to come nearer to our present subject, many of Andral's cases of pneumonia manifested the most marked improvement, for a time, after a free bleeding from the arm; and not once only, but more than once, on the repetition of the bleeding when the inflammation sprang up again.

I think that we cannot contrast the practice to which I have now referred, with that adopted around us, at the present day, without arriving at the conclusion, whatever we may say of stimulants, that depletion, or even depression, is not endured as it used to be twenty or thirty years ago.

If, then, such be the present type of disease, it seems a very probable supposition that we shall meet with cases of pneumonia, in which support and active stimulation will be imperatively required. Whether such a supposition be correct, must be determined by experience; and the use or avoidance of stimulants, in the treatment, will follow the result of such experience. The result of my own limited observation has led me to the conclusion that cases of pneumonia frequently present themselves, in which support by stimulants is greatly needed; and that there are not a few, in which the largest administration of stimulants affords the only chance of saving the life of our patient.

Now I am unable to see that this opinion involves the application of the plan of treatment I have just advocated to all cases of the disease, without distinction; or that it forbids the use of the opposite class of medicines, whenever circumstances permit. It must be allowed that pneumonia presents itself under very different and even opposite aspects, according to circumstances, sometimes easily appreciated, sometimes concealed from our observation. The cases which I shall briefly relate, will, I think, place this point in a clear light. If Cases I and VII be compared, a very remarkable difference will be noticed between them; in both, the disease occurred in young, healthy, and vigorous subjects; both the patients stated themselves to have been temperate in their habits; in both, the attack probably resulted from simple exposure to cold: yet, in one case, the patient was so exhausted as to require full doses of stimulants; whilst, in the other, half-grain doses of tartar emetic were taken without any depressing effects; and, to make the parallel complete, under these opposite methods of treatment, each patient recovered in nearly the same period of time, so far as the *primary* effects of the disease were concerned. Pneumonia, indeed, is not at present regarded as being necessarily attended with all the peril which was, at one time, imagined to attach to it. On the contrary, our hopes and fears are based much less upon the intensity, or even the extent of the inflammation, than upon collateral circumstances—its cause, the presence or absence of blood-poisoning, the presence of cachexia, the soundness or unsoundness of the patient's previous health and his habits of life; and, more than all, upon the amount of reaction of which the constitution seems to be capable at the particular time. Thus, there are cases of the disease which we do not hesitate to leave to the unaided powers of nature—to that tendency to recovery which pneumonia undoubtedly possesses if a fair chance be given; thus there are cases, even of double pneumonia, which we regard without serious apprehension (I have seen more than one such case myself); whilst, on the contrary, there are others in which only a very limited portion of one lung is involved, and yet we entertain the gravest fears for our patient's life. It seems, therefore, that there is abundant reason, founded on the nature of the disease itself, for a variety in the treatment adopted in different cases.

Now, among the varieties of pneumonia, there is an important class having a most unmistakably typhoid type; the so called low, or asthenic pneumonia. We meet with this class in the course of certain blood-diseases, particularly in typhus, erysipelas, and acute rheumatism; it occurs also in surgical and puerperal fever; in persons whose health has been broken by disease, by intemperance, by prolonged mental anxiety or overwork; in those in a state of cachexia; and in certain subjects of organic disease of the spinal cord. Sometimes, also, instances of this character are met with in subjects apparently in good health, from the operation of some cause not apparent to us, as in Case VII.

Even under favourable circumstances, pneumonia exercises a powerful influence over the nutritive functions, of which the rapid emaciation which often occurs affords an exemplification; hence, when it attacks a system ill prepared to withstand its depressing influence, symptoms of exhaustion manifest themselves early, and often to a very serious extent. Under such circumstances, the pulse is often rapid, is accelerated by the smallest movement or the least excitement, and is always very yielding, frequently vibrating and unsteady; the sounds of the heart are feeble; the lips are dusky, from languid circulation through the lungs, and the face is rendered livid by any exertion; profuse sweatings occur; the patient is unable to sit up, except for the most cursory examination; delirium of a low type is frequently, though not invariably, present at intervals; and the sufferer expresses himself as feeling very ill, and his whole aspect betokens the serious character of his disease. In such cases as these, I apprehend that we have chiefly to fear depression of the powers of circulation, especially of the energy of the heart; and it is upon the circulating function that stimulants exert a very direct influence; hence, it is to maintain the force of the circulation, especially against the obstacle opposed to the right ventricle by the engorged lungs, that I advocate the administration of stimulants, and mainly of brandy, graduated according to the urgency of the case, but fearlessly increased if necessity arise.

Now I venture to ask whether there is any real reason why stimulants should not stand, in relation to pneumonia, and I may say, in relation to inflammation generally, in the position they hold with respect to typhus?

I well remember that, when I was studying my profession, the use of stimulants in typhus itself was treated as a matter requiring great circumspection, and not to be admitted without much consideration; now, however, we proceed more boldly, and have no hesitation in employing these remedies freely, even in very large doses. It seems to me that the indications in pneumonia are identical; nor can I discover any thing in the presence of an inflammation to alter the conditions of the case; certainly the presence of pneumonia in typhus is not considered to require the suspension of our stimulants. We are now no longer influenced by a mere name; we now recognise, in inflammation, a process tending directly to degrade the nutrition of the part which it affects; involving an arrest of the current of blood in the inflamed capillaries, softening of tissue, and causing effusion of fluids which damage the structure of the organ in which they are poured. Nor do we hesitate to apply local stimulants to the inflamed part, and to quicken the process of inflammation itself, when it is flagging, by strong tonics and moderate stimulants; nor again are we sparing of our wine in weakly debilitated habits. If this be so, why, I ask, should we draw an arbitrary line, beyond which our stimulant treatment shall not pass, whatever be the exhaustion from which our patient is suffering?

In looking at the cases in which free stimulation has been adopted, with the limitation I have prescribed, I am unable to detect the faintest evidence that the treatment has done harm; on the contrary, in many cases, immediate reduction takes place in the frequency of the pulse, with increase in its force, and restoration of its steadiness, under the influence of frequent and full doses of brandy; the heart's sounds gain strength; marked evidence of amendment is visible in the aspect of the patient; discomfort is relieved, energy is increased, the lividity leaves the lips, and not unfrequently the improved state of things is spontaneously testified by the patient, in reply to our first inquiry. This was most remarkably the case in my seventh case.

And there are two circumstances in relation to this negative view of the subject, which I think, have a very positive value. First, the large doses of brandy administered never, so far as my experience goes, produce any excitement or any narcotism. I cannot but lay very great stress on this fact, for brandy is by no means negative in its operation. That a delicate woman should swallow two tablespoonfuls of brandy every two hours, for forty-eight hours, without an approach to anything like intoxication, is surely a very significant circumstance. I cannot but conclude that the force of the brandy is expended in some other operation than that of producing intoxicating effects upon the brain. It will be further noticed, in some of the following cases, that a reduction in the quantity of brandy, during the progress of the disease, was actually followed by relapse; and that it was necessary to restore the medicine to its former dose. The second remark I would make is that, in some of the cases, the symptoms of *local* disease disappeared very rapidly; quite as rapidly as in an ordinary sthenic pneumonia, in a vigorous subject; a circumstance which at least proves that no harm had resulted from the active and powerful agent employed; which I should regard as affording powerful evidence in my favour, when I remember that in the low state of constitution to which I applied the remedy, local mischief usually occupies a longer period in resolution, than in the opposite state, unless some assistance be afforded.

It has been asserted by M. Claude Bernard, on the authority of an American physician, in answer, I suppose, to such an argument as I have now adduced, that the alcohol is not absorbed, in consequence of the abnormal condition to which typhus (the disease which suggested the remark) reduces the nutritive functions; and in support of the hypothesis, he quotes an experiment in which prussiate of potash (a salt readily absorbed and voided in the urine) having been administered to a typhoid patient, could not be found, by the usual tests, in that fluid. I have twice repeated the experiment, employing iodide of potassium: once in a patient suffering under typhoid fever, once in a case of asthenic pneumonia, both patients taking at the time full doses of brandy. In each instance I detected the iodine in the urine by the usual test. Of course, this experiment can only be accepted as proving by implication the absorption of the brandy; at any rate, it fully establishes the possibility of such absorption.

The most conclusive proof of my position would be afforded by statistical data; especially by the duration of convalescence under the stimulant treatment; but I think that the particulars required for a sound induction can only safely be afforded by a larger comparison of cases than we at present possess the means of instituting; still I believe that a sufficient number of successful cases have been reported to give the practice I advocate a fair claim to consideration.

In conclusion, I would remark that I by no means regard the practice in question as forbidding the cooperation of blisters, or even of local bleeding. With regard to the latter measure, I have learnt, from two cases of typhoid fever, in which profuse hæmorrhage occurred from the bowels, at the time when the patient was in the lowest state of depression, and yet perfect recovery was effected, that moderate loss of blood, even in very low states of constitution, is not attended with danger, *provided the patient maintains the recumbent posture;* I should, therefore, not hesitate to apply leeches, if I saw occasion for such a procedure. Equally do I think that mercury is not forbidden to those who esteem its efficacy in pneumonia; for my own part, I confess that I mistrust its utility, and fear its ill consequences in the inducing of severe and even dangerous diarrhœa, as actually happened in one case under my observation during the period of recovery.

The following cases are selected with a double purpose: to illustrate the different conditions of physical strength which are exhibited in pneumonia, and also to exemplify the use of stimulants in doses of various quantities:—

Case i. E. M., a fine, well-made young man, of temperate habits, and excellent general health, was admitted into the Birmingham General Hospital, suffering from pneumonia, apparently in consequence of exposure to cold, on the fifth day of the disease. His pulse was 112, soft; respiration 16, very catching; evidence of pneumonia of the entire lower lobe of the right lung existed. The tongue was rather dry, but his general condition was satisfactory; he was alert, and fully equal to some exertion. He complained of severe pain in his right side, beneath the mamma, extending towards the clavicle. Eight leeches were applied to the painful part. Sumat 3tis horis antimon. potassio-tart. gr. 1-6.

On the following morning, the pulse was 106, fuller; respiration 23, very straining; urine copious; tongue moist; aspect very satisfactory. Sumat antimon. potassio-tart. gr. ¼, 4tis horis. In the evening of the same day, the pulse was 102; the respiration 36. The expectoration not copious; pain in the side continued. He took milk very freely. The dose of tartar emetic was increased to half a grain, and a turpentine stupe was applied to the side.

On the next (the third day) his symptoms were generally improved. Pulse 96; respiration irregular, between 20 and 30. The dulness had decidedly diminished, and fine crepitation was again audible over the posterior region of the right chest. In the evening the dose of antimony was reduced to a quarter of a grain, and the medicine was omitted on the fifth day, when his pulse was 80, and his appetite had returned. On that day the natural clearness on percussion was nearly restored; and on the eighth day respiration was purely vesicular.

Case ii. A delicate boy, aged 14, was attacked with sharp fever of an inflammatory character, followed by pain in his right flank, and in the upper part of the right front of his chest. On the evening of the second day, evidence of pneumonic consolidation of the lower half of the inferior lobe of the right lung presented itself, with indications of bronchitis in the opposite lung. The feverish reaction was sharp, but the strength of the pulse, and the general aspect of the patient did not warrant further antiphlogistic treatment than a few doses only of tartar emetic (⅛ of a grain in each), and the application of a blister. He simply took salines, and subsequently small doses of carbonate of ammonia. On the fifth day of the pneumonia the physical signs began to yield, and on the following day the dulness was removed, and vesicular expiration and inspiration were restored. He made a good recovery. In this case I had the advantage of the advice of Dr. Evans.

Case iii. A. T., aged 17, a feeble delicate girl, who, on a former occasion, had suffered from acute rheumatism, with endocarditis, and double pneumonia, was admitted into the Birmingham General Hospital, with a renewed attack of acute rheumatism. Her pulse continued about 120; over the heart a diastolic aortic bellows-sound was audible.

On the seventh day after her admission, her pulse was 112; her respiration had risen from 28 to 38; and imperfect dulness with bronchial breathing announced themselves at the base of the left lung, together with rhonchus throughout the whole of both lungs. She had cough, and copious expectoration of opaque mucus; she perspired profusely.

The treatment previously adopted had been two grains of disulphate of quina and a quarter of a grain of opium every four hours. I made no change in the treatment, beyond the repeated application of turpentine to the left side, and the addition of four ounces of wine in twenty-four hours. The consolidation rapidly became complete, and it was seventeen days before it was removed; but the patient's state continued satisfactory, and her recovery was as nearly perfect as her cachectic condition permitted us to expect.

I must confess that, in comparing this and the following case with some which succeed, I am led to suspect that a more free use of stimulants would have hastened the removal of the consolidation.

Case iv. A cooper, aged 24, was admitted into the Birmingham General Hospital with acute rheumatism. He was in a state of considerable depression; pulse 136; respiration 34. He had a recent pericardial friction-sound, with increase in the extent of the cardiac dulness, and pneumonic consolidation of the lower lobe of *each* lung; the dulness on the left side extending to the inferior angle of the scapula; on the right not attaining that elevation by the distance of two inches. Some effusion had also taken place in the right pleural cavity. I ordered a blister over the cardiac region; calomel and opium; and four ounces of wine daily. Notwithstanding the amount of acute disease, the patient's symptoms never presented a grave character, though emaciation progressed very rapidly. From February 18th to March 8th, his pulse varied between 136 and 120; respiration between 40 and 30. He took nourishment. His urine was copious; and, though he felt some oppression, his breathing was free from labour. He never came under the influence of mercury; and on the fifth day, one-half of a grain of opium every three hours was substituted for that medicine. The wine was gradually raised to ten ounces on the fifth day; blistering was repeated more than once. On the fifteenth day, the pericardial friction-sound was no longer heard; but vesicular breathing was not fully restored to the lungs until the thirty-second day.

Case v. A girl in a state of extreme anæmia, aged 23, was admitted into the Birmingham General Hospital. She was extremely depressed, with low feverish reaction; and was quite unable to endure the semi-erect posture. Respiration was 36. She had a frequent spasmodic cough, with expectoration of viscid mucus; a harsh systolic bellows-sound was heard over the aortic valves. She was ordered two ounces of wine.

I must confess to having made an insufficient examination of this patient until the sixth day, when I discovered imperfect dulness in the posterior region of the chest, on the right side, up to the fifth dorsal spine, with bronchial breathing and bronchophony. A blister was prescribed; and on the following day, as her pulse was very vibrating and yielding, in number 104, whilst extreme feebleness remained; and as, moreover, her lips were dusky, four ounces of brandy in twenty-four hours were ordered, together with chloric ether and carbonate of ammonia. On the following day, the patient's pulse was 112, vibrating; respiration 40. Six ounces of brandy were prescribed; and, on the day after, her pulse had sunk to 104, and her respiration to 30. On the following day, her pulse was again at 112; respiration 36; but her aspect had greatly improved, the expectoration had lessened, the dulness was much reduced, and the other physical signs had much improved.

The amendment was still more evident on the succeeding day, and was strongly asserted by the patient herself. The physical signs of pneumonia were also receding. Two days afterwards, being the eighth day from the discovery of pneumonia, all physical signs of that disease were removed. It is to be added that, before she left the hospital, the bellows-sound was hardly audible—a circumstance which renders it probable that it was of an anæmic character, although its roughness during the early days rendered such a supposition at first improbable.

Case vi. I might here introduce a case of low pneumonia, which I attended with Dr. Keyworth, in a gentleman of rather feeble habit, who had suffered much from anxiety, in which the inflammation was at first central. In this case, the patient's quantum of wine was raised to two ounces hourly; partly, indeed, without our privity. The case was a lingering one, from the extreme feebleness of the subject, but he entirely recovered; and I now refer to it to obtain Dr. Keyworth's confirmation of the benefit derived from stimulation.

Case vii. A nightman, aged 24, of sound health and temperate habits, admitted into the Birmingham General Hospital with pneumonia of the upper lobe of the right lung, of three days duration. He was greatly depressed, and was so faint at his admission, and his face was so livid, probably from the effort of the journey, that the nurse, a very experienced one, thought him dying. After recovering from the effect of his journey, his pulse was 108, small; respiration 44. He was ordered eight leeches to the chest; four ounces of wine; and ammonia.

Next day, the pulse was 116, very feeble; respiration 40; face dusky and livid on the smallest exertion; sounds of the heart very feeble. The lower and middle lobes of the lung were now implicated, so that we had to deal with inflammation of an entire lung. Turpentine stupe, ammonia and chloric ether, and one ounce of brandy every two hours, were ordered.

Next day, the pulse and respiration had fallen to 108 and 36 respectively; the heart's sounds were clearer; the lividity was gone; his tongue was rather dry; there was no confusion; urine was plentiful; he perspired profusely; he took nourishment freely. On the following day, he spoke of himself as feeling better, and had passed a good night. The stupe was repeated; the brandy was reduced to half an ounce. But in the evening he was more feeble, and the pain in the upper part of the side had much increased. A blister was applied to the painful part, and half an ounce of brandy given hourly.

On the next morning he expressed himself strongly as feeling better, and had passed a good night, requiring to be awakened for the administration of the brandy. The pulse and respiration had fallen from 108 and 42, the standard of the preceding evening, to 98 and 31 respectively; the expectoration also contained less blood. Brandy was ordered every two hours.

The amendment was fully maintained in the evening, when the brandy was reduced to a dose every three hours; and, on the following morning, his pulse and respiration were 88 and 30 respectively. Moreover, the dulness was beginning to yield, and crepitation to reappear. Vesicular breathing was fully restored on the thirteenth day after admission; it was rapidly reinstating itself five days previously. The emaciation which pneumonia tends to produce was most strongly developed in this man.

Case viii. I visited Mrs. C., aged 27, with Mr. Swain. She had been much lowered by previous illness, and had miscarried twice within the year. She had been confined three weeks.

She was suffering very acute pain in her left side; pulse 158; face pale; slight blueness of lips; respiration abdominal. There was no difficulty in establishing the presence of pneumonia at the base of the left lung. She was ordered six leeches to the side, salines, and ten grains of Dover's powder.

On the next morning, we found the pain greatly relieved. Pulse 154, very yielding; respiration 32; lips rather livid. The pneumonic consolidation had risen higher in the lung, as far as the apex of the scapula. Ammonia and chloric ether, beef-tea and milk, were ordered. In the evening, pulse and respiration as before, but the pulse was more tremulous. The heart's sounds were tolerably distinct. Much perspiration. Intellect clear. A blister was ordered to be applied for four hours; and half an ounce of brandy to be given every two hours.

She passed a more comfortable night; her pulse had sank next morning from 154 to 128, and was firmer; respiration had risen from 32 to 42.

On the following morning, we found that our patient had passed a bad night, and had had much delirium. She felt very ill. The pulse was 112, steady, though very feeble; respiration 40. A catheter was required. One ounce of brandy was ordered to be given every two hours. She expressed herself as feeling better in the evening; her voice was firmer and louder; there was no delirium.

On the day following, her state was satisfactory; she continued to take an ounce of brandy every two hours. But next day she was not so well; she had wandered more, though her appetite had returned. The amount of brandy had been somewhat lessened; the original quantity was therefore restored, and quinine was prescribed.

The brandy was continued for one or two days. On the eighth day of my attendance, the dulness had gone, and vesicular breathing was restored; but her pulse and respiration continued 130 and 40 respectively. She speedily recovered sufficiently to be removed to her mother's.

I must add that, in this case, I thought the patient's condition nearly desperate; I had little hope of a favourable termination of the case. Nor can I entertain a doubt, that the successful issue could have been procured by no other means than by the free administration of brandy which was employed. As I do not vaunt the use of stimulants as a certain cure for pneumonia, I think it unnecessary to occupy further time by detailing cases in which these remedies failed to save the patient. I only wish freely to admit that such cases have occurred to me, but that they presented not the smallest reason to warrant the supposition that the stimulants were concerned in producing the fatal event.

I wish to state, in conclusion, that I desire to extend the remarks I have now applied to pneumonia, so as to embrace the whole subject of inflammation; admitting the same limitations, and advocating a similar plan of administering stimulants, when occasion appears to call for their use.

OBSERVATIONS ON THE PHYSIOLOGICAL ACTION OF ACONITINA.*

By Dyce Duckworth, Esq., Student in Medicine in the University of Edinburgh.

The special physiological actions of aconitina have received able attention and observation at the hands of Drs. Fleming and Headland. Upon reading over carefully the different kinds of action said to be exerted by this body, I was particularly struck with a singular incongruity in the accounts as to the condition of the pupil, both during the time when the poison was acting, and also after death had resulted. This fact, amongst others, led me to make a series of experiments with the alkaloid, which extended over a period of five months, and were performed whenever leisure and circumstances permitted. The first object was to obtain pure aconitina; for I imagined that possibly the incongruous statements regarding its action might in some measure, at least, be due to the employment of impure samples of the alkaloid. From its costliness, it is apt to be adulterated, or met with in an impure condition. I therefore obtained three samples—one prepared by Messrs. Smith of Edinburgh; another by Mr. Morson of London; and a third foreign one, which was not quite pure. I could rely upon the purity of the first two samples, by applying the only test known for the alkaloid, viz., confidence in the characters of the chemists who prepared and sold it; and I found them equally efficacious and infinitely superior to the foreign specimen.

I experimented upon rabbits, cats, and kittens, internally; and topically upon the conjunctivæ of two human adults.

Action of Aconitina given internally. When aconitina in solution is given by the mouth, the first effect produced is a most intense tingling sensation in the tongue and fauces; this is followed instantly by a copious secretion of saliva, over which the patient appears to lose control, since it is not swallowed, but flows over the lips in a frothy and slimy condition. This is seen to the greatest excess in the case of the cat; not nearly so much is secreted in the rabbit. Dr. Headland thinks this condition is due in some measure to paralysis of the fauces. In the human subject, the patient is observed to clutch at the throat after aconite-poisoning; and all animals exhibit uneasiness in that region, as if to assist or accomplish deglutition, which function seems to be lost in all cases, while pharyngeal and œsophageal actions appear rather to be reversed. The respiratory functions are next apparently interfered with; the breathing becomes laboured and spasmodic; and cries are uttered with more or less vigour, according to the amount of the dose. Next vomiting occurs, and may continue several times; this is attributed, with good reason, by Headland, to derangement of the function of the vagus, since *post mortem* examination reveals no appreciable change in the coats of the stomach. Sensation next appears entirely lost; and the animal, as if mad, tosses itself about wildly; endeavours to walk, but cannot; falls over on its side; takes prodigious leaps; and is then prostrated. Convulsions generally appear at this time, and the breathing becomes slower and more difficult. Finally, total paralysis is observable, and death ensues.

Condition of the Pupil. During the action of the poison, the pupils are slightly *contracted;* but I have noticed in all cases that, about two or three minutes before death, and at the time of death, they *dilate* enormously, and generally continue so after death, though I observed in some cases that, in an hour or two after death, one pupil contracted, while the other remained unchanged; and I have even seen the contraction vary in the same pupil several times within twelve hours after death. The action on the pupil differs, however, according to the manner in which the poison is introduced into the system. I find the prevailing opinion to be, that aconite causes *contraction;* Headland gives it as his opinion, that *dilatation* is produced. It is a very difficult matter to say what the real effect is. Dr. Fleming states, in his admirable dissertation on *Aconite* (p. 11), that "in general the pupil is more or less contracted, dilating to its *natural size* immediately on the cessation of respiration". This statement is the most correct one I have met with, though I differ from it in that I hold the pupils to dilate considerably beyond their normal size at the time of death; in fact, this was a most constant and striking symptom in every case in which I employed sufficient to cause death. Hence I would say, *as a rule, the pupil is more or less contracted, dilating enormously a few moments before and at the time of death.*

As to the cause of this, Fleming states that the symptoms seem to him attributable to the same pathological cause as the convulsions. He attributed the convulsions to cerebral congestion, since they only occurred when the poison acted slowly, and the respirations were diminished; so that, from advancing asphyxia, the venous system must have been highly congested. "Contraction was present in all the cases in which convulsions occurred." I can verify this latter statement. He found that, when muriate of aconitina was injected into the veins, the pupils dilated before any amount of venous congestion could have taken place (and I have always observed that dilatation occurs speedily when a large dose is given, which acts fatally soon); hence he concluded that *dilatation* is the specific or direct effect on the pupil.

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* Excerpt from a Dissertation upon the Physiological and Therapeutical Actions of the Alkaloids. Read before the Royal Medical Society of Edinburgh, December 14th, 1860.

We must believe that dilatation ensues upon cerebral congestion; and our main difficulty, it seems, is to account for the subsequent final dilatation after contraction: this, I conceive, we must trace to purely cerebral influences.

We shall refer to this subject again in considering the manner in which aconitina causes death; but I may give briefly a case of poisoning by aconite which happened this year, and which has been most minutely communicated to me through the kindness of Dr. Nevins, of Liverpool. He writes, "I had a patient, a young lady, who swallowed a fluiddrachm of the officinal tincture of aconite. . . . For about six hours her life was in imminent danger. She recovered at last, however. When first seen by her father, an hour after taking it, the pupils were so dilated that no iris could be seen, and this condition lasted till the following day. It was a fortnight before she had entirely lost the tingling and numbness, and feeling of malaise, and for weeks after she was subject to sudden fits of numbness in the feet, so severe as to cause her to fall, even six months afterwards she was liable to vomitings and sensations of cramp in the throat, to which she was not subject before she took the poison." This was a very remarkable case. One of the most marked features in poisoning by aconite in the human subject, and which I have not met with in any treatises on the matter, is, the total inability to act or speak, though consciousness is to a considerable extent maintained up to the time of death; the mind, too, is often peculiarly active.

Patients describe their sensations as if their tongues were gummed to their mouth; and they could give no alarm as to their condition. The eyes are kept wide open; and there is confusion of vision, sometimes with inability to close the eyes at the command of the will.

Topical Action of Aconitina. When aconitina is applied to the skin in solution or in the form of ointment, it quickly paralyses the superficial sensory nerves, causing the usual benumbing sensation. I tried topical application of about one-fortieth of a grain of the alkaloid mixed with water to the human conjunctiva, in two cases. Slight congestion of the membrane occurred, and photophobia in both cases; also slight contraction of the pupil. The tingling sensations continued for six hours; and at the end of that time the eyeball, in one case, protruded an eighth of an inch from the socket; in the other, the tingling was referred to the angle of the jaw and down the side of the neck.

These were severe experiments and not to be repeated; they further lost an entire night's rest to both patients. Now the contraction which was induced in these cases was attributable, not to any specific action of the alkaloid, but to irritation produced mechanically by its fine particles.

Dr. Fleming is of this opinion, and we know that dust and irritants of all kinds induce contraction when directly applied to the eye. Fleming found that when aconitina ointment was applied to the conjunctiva contraction occurred speedily, which lasted for several hours; but when it was applied to the forehead or temple the pupil became occasionally dilated and partial blindness ensued—this he attributes to reflex action through the third and fifth nerves.

I applied one-thirtieth of a grain of pure aconitina in ointment between the eyes of a cat, but, as this animal possesses evident volition over the iris, it was impossible to state with any confidence the pupillary state afterwards; in two hours time the animal was foaming at the mouth and not breathing quite normally, also suffering from general *malaise;* she had probably been cleaning herself and may have licked her paws.

It is clear that we can never make use of aconitina as a direct local therapeutic agent for the eye.

Mode in which Aconitina causes Death. This is a question which can hardly be called settled. Some authorities attribute death to asphyxia; others, including Dr. Headland, to cardiac syncope.

The subject was brought before the British Association at Oxford last year by Dr. E. R. Harvey; he performed his experiments upon dogs, rabbits, and frogs with Fleming's tincture of aconite; and he considers they went to prove that aconite acts *first* on the nerves, and then on the muscles, killing by its action on the heart; the blood and urine, he stated, were found normal. In the discussion on this paper, Sir B. Brodie remarked that in his experiments many years ago with the expressed juice of aconite, he found it to act as a narcotic, and to arrest respiration; and he recommended artificial respiration for recovery from the effects. Dr. Sharpey said that in some experiments of his, he had noticed the same effects as Dr. Harvey; viz., the stoppage of the heart's action, and of muscular irritability, the nerves also leading to the affected muscles were deprived of their excitability. Thus Drs. Harvey and Sharpey attribute death to *syncope*, and Sir B. Brodie to *asphyxia.* Professor Bennett remarks, in his *Principles and Practice of Medicine*, on a case of aconite poisoning, that "it is difficult to separate the effects of syncope from those of asphyxia in such a case, since the first condition must induce the other." Fleming states that three varieties are observable in the symptoms and mode of death: *first*, it may prove fatal by a powerfully sedative impression on the nervous system; *secondly*, by suspension of the respiratory functions; and *thirdly*, by syncope; he further remarks that the latter conditions are always more or less conjoined.

My own observations have led me to the following conclusions. When a large dose of aconitina is given, I think death is caused speedily either by direct cardiac syncope, or by a powerfully sedative impression on the nervous system, and certainly the action of the heart ceases. In this case there are no convulsions as in death from asphyxia, and the dilated pupils may here be the direct and perhaps specific effect of aconitina when it acts so speedily as to prevent any amount of cerebral congestion.

When a small dose is employed, death is averted for a time, the heart's action is enfeebled by degrees, so that the pulmonary and systemic circulation go on very slowly. Meantime, the phrenic and respiratory system of nerves are becoming affected; respirations are performed less frequently, and are accompanied with deep spasmodic action of the diaphragm, which will also account for the cries uttered, the laryngeal muscles being paralysed; the venous system becomes engorged, and the pupils dilate finally from cerebral congestion, while the heart and lungs cease to act. In this case, I consider, a combination of asphyxia and syncope causes death. In both cases sensibility is soon lost, and muscular paralysis is observable early. The poison may be classed as a general sedative.

The Pith of the Pine and its Syrup. M. Lagape has concentrated the pith of the *pinus maritima* into a pectoral syrup, which has been used with much benefit in many chronic diseases, such as catarrh, humid asthma, bronchorrhœa; it has also been used successfully in the acute indispositions of winter, such as rheumatism, laryngitis, pharyngitis, angina, etc. This syrup of the pith of pine has also an evident action on the urinary secretions and inflammatory irritation of the bladder. It advantageously does away with the other medicinal preparations from the pine which were so generally used upon the introduction of this the most essential and most intimate part of the tree. (*Revue Médicale.*)

Reviews and Notices.

Adulterations Detected; or, Plain Instructions for the Discovery of Frauds in Food and Medicine. By Arthur Hill Hassall, M.D.Lond., Analyst of the "*Lancet* Sanitary Commission", etc. Second edition, thoroughly revised: including the Act passed in 1860 for Preventing the Adulteration of Articles of Food and Drink; with other Additions. Pp. 712. London: Longman and Co. 1861.

There must be a difference of opinion between Dr. Hassall and ourselves as to the meaning of the words "second edition, thoroughly revised," "with additions". This so-called second edition is, as far as we can see, a mere reprint of the first edition issued in 1857; the only addition being the Adulteration Act of 1860. The number of pages in the body of the work in the two editions is the same; and a comparison of a large number of the corresponding pages in the two works shows that they fit each other with mathematical accuracy.

The first edition, at the time of its appearance, was spoken well of in this Journal. We retract nothing of what was then said; but we must now say that Dr. Hassall has acted very unfairly to his own reputation in issuing, after nearly four years, a mere reprint of a former work, with but one addition (no doubt a very useful one), under its present high-sounding title. Surely, in the space of time which has elapsed since the book first appeared, he might have given us some more information on the adulteration of various drugs—a subject of the highest importance. But, as far as appears, he has of late been simply doing nothing in this direction.

On Diseases peculiar to Women, including Displacements of the Uterus. By Hugh L. Hodge, M.D., Professor of Obstetrics and Diseases of Women and Children in the University of Pennsylvania. Pp. 409. Philadelphia. 1860.

This is a large well-printed work, which appears to be for the most part devoted to the exposition of two ideas. The pathology of the diseases peculiar to women is summed up in the two words "irritation" and "sedation". In "excitement or irritation", or "inertia or sedation", are to be found the explanations of all female ills. This is simplicity with a vengeance. The worthy transatlantic professor, not being himself quite satisfied with the completeness of this his system of pathology, is constrained to admit that much depends on "displacements of the uterus". The expositions of his views on the latter subject are assisted by several drawings, which are, says our author, "based upon preparations in my museum, and upon the information derived from my daily experience in the treatment of uterine diseases". They are evidently not drawn from nature, and afford curious examples of the power of imagination.

The author is doubtless a better practitioner than pathologist. Many of his observations on treatment are very much to the point, although there is nothing particularly novel under this head to be found in the volume. We cannot recommend the book, save for the excellence of the printing and general getting up.

A Glossary of Scientific Terms for General Use. By Alexander Henry, M.D. Pp. 202. London: Walton and Maberly. 1861.

This little volume will be found of much use to the student of scientific works. It is small and compact, and contains the cream of scientific terms which are likely to be met with. In the preface, we are informed that,

> "In drawing up the work, the author has collected the definitions, wherever practicable, from the most modern standard treatises on the different sciences. He has also availed himself of the assistance derivable from the *Imperial Dictionary*, and the excellent *Expository Lexicon* of Dr. Mayne. In all cases he has endeavoured to give the definitions in as concise and simple a form as is compatible with clearness. The accentuation of the words has been carefully marked; and, for the use of those unacquainted with Greek, the Greek words have been printed in both Greek and Roman characters."

Dublin Quarterly Journal of Medical Science for February 1861. Dublin: Fannin and Co.

This periodical contains its usual valuable amount of practical information. Reports in operative surgery are given by Mr. Butcher; Croup is treated of by Dr. Whittle of Liverpool; and from Manchester, Dr. Roberts contributes a successful Case of Ovariotomy. Mr. Wilde continues his Essay on Congenital Diseases of the Eyes; Mr. Canton gives two cases of Excision of the Knee-Joint; and Dr. Banks winds up the original articles with a curious document—the Writ *De Lunatico* which proves the famous Dean of St. Patrick's to have been, according to law, a person of unsound mind. The reviews are numerous. That on Virchow's *Cellular Pathology* is very disappointing. Upwards of twenty pages does the writer devote to this book, and yet, curiously enough, never once even touches on the main feature of it—the cellular pathology. This new pathology of Virchow appears to be of the category of Newton's *Principia:* only two or three select souls seem able to read it to a critical purpose.

Trattato sulla Patologia, Diagnosi, e Cura delle Malattie del Cuore, di W. O. Markham, Med. Dr. Recato dall' Inglese dal Dr. G. V. Ciaccio. Pp. 338. Napoli.

Treatise on the Pathology, Diagnosis, and Treatment of Diseases of the Heart. By W. O. Markham, M.D. Translated by Dr. Ciaccio. Naples.

We have been surprised at receiving from such a quarter of the world as Naples the above mentioned translation of an English work. We call attention to the fact, as showing that, amidst all the great passing political events which have lately made that country so conspicuous among the nations of the world, our medical brethren have still time to turn an eye to the medical literature of this country.

A Treatise on Fever. By Robert D. Lyons, K.C.C., M.B.T.C.D., Physician to Jervis Street Hospital, Dublin, etc. Pp. 473. London: Longman and Co. 1861.

Dr. Lyons is well entitled to write a book on Fever. His experience in Ireland, where fevers are at all times so prevalent, coupled with that obtained as Pathologist-in-Chief to the British Army in the Crimea, and during his admirable investigation of the Yellow Fever lately prevalent at Lisbon, have afforded him rare opportunities for observation, which his identity and talents have turned to good account.

Although designated a *Treatise on Fever*, the work before us is of a somewhat fragmentary character, and is made up of selections from a Course of Lectures on the Theory and Practice of Medicine, delivered by the author. The volume is divided into eleven chapters, and is provided with a very complete index. The first three chapters contain observations on the prevalence and mortality of Fevers generally, and on their pathology and classification. The next five chapters are devoted to the consideration of Continued Fevers; while the last three, extending over about one-third of the volume, treat of Yellow Fever.

As regards the general pathology of Fever, Dr. Lyons subscribes to the views, so ably maintained by Virchow and Parkes, that fever essentially consists in an increase of temperature, which is caused by an increased consumption of organic material in the system, and appears to have its origin in certain changes in the nervous system. In other words, the essence of fever is *Calor prœter naturam*, as was long ago stated by Galen.

Dr. Lyons's Classification of Fevers is one which requires, on some points, an explanation, which is not given in the work. He divides all fevers into three great classes: Primary Fevers, Irritative Fevers, and Eruptive Fevers. The Irritative Fevers include Gastric Fever, Gastro-Intestinal Remittent, and Hectic Fever. Now, what is gastric fever? and what is gastro-intestinal remittent? Most recent observers have regarded both these fevers as modified varieties of the so-called typhoid or enteric fever. Certain it is, that the *febris gastrica* described by Bullonnis in 1734, and the epidemic gastric fever described by Cheyne in 1834 and by Craigie in 1837, were nothing more or less than the *fièvre typhoïde* of Louis. Then again, the researches of Rilliet, Barthez, West, and many others, have demonstrated that the gastro-intestinal remittent fever of children is of the same nature. Why then this confusion and multiplication of terms, without some definite explanation? Of course, it is not here denied, that inflammation of the stomach and intestines can give rise to fever; but we have as little right to speak of the pyrexia arising in this way as distinct forms of fever, as we have to speak of tonsillitic fever, or pleuritic fever.

As to continued fevers, Dr. Lyons adopts Cullen's subdivision into Synoclia, Synochus, and Typhus, and to these he adds a fourth fever, the Typhoid or Enteric, although it is not very clear that he regards it as a distinct species from typhus. Synoclia, or Inflammatory Fever, is discussed at some length, and along with it the so-called Relapsing Fever. Relapsing fever is said to have been pretty common among the British troops in the Crimea, during the summer months of 1855—a circumstance which we do not recollect to have seen before noticed.

With regard to synochus, we find little more information, than is contained in the old Cullenian definition, that it is a form of fever which commences with synoclia and passes into typhus. The author adds:

> "I am myself not by any means satisfied that we are warranted in rejecting synochus; and I believe it might be made a convenient head, under which to rank the so-called 'nervous fevers', and probably also the 'pernicious fevers', with some other varieties of pyrexial action, the nosological position of which is as yet unsettled. But as this whole subject still rests on very debatable ground, I shall defer to another time the consideration of synochus and its varieties."

As regards the specific distinction between typhus and typhoid fever, Dr. Lyons appears to be still halting between two opinions. Influenced, no doubt, by the atmosphere in which he lives, he is not prepared positively to admit that the two fevers are specifically distinct. To get out of the difficulty, he follows a plan, which was adopted some years ago by Dr. Aitken, of including the two fevers under the common designation "Typhous Fevers," and speaking of typhoid fever as a distinct clinical variety. While, however, Dr. Lyons seems somewhat unwilling to enter into the discussion of the question of identity or non-identity, he makes greater admissions than we recollect to have seen as yet made by any other Irish physician of eminence. He observes:

> "It is not our intention to enter at length into the vexed question of the identity or non-identity of the typhus and typhoid fevers, so called. We shall recognise a practical clinical difference in the course, duration, symptoms, and secondary lesions of the two morbid processes. It is, indeed, not improbable that, while they are to be regarded as branches of the same stock, they recognise a different exciting cause. The natural history of the two diseases differs likewise in many essential respects. The spotted typhus, for instance, it is well known, is historically associated in Ireland and elsewhere with great famine periods, and a depressed and impoverished state of the population. The typhoid or enteric fever, on the other hand, is not largely called into existence by these agencies; but it has been shewn to be connected with such causes as imperfect ventilation, impure water-supply, bad sewerage, and the foul emanations of animal and vegetable refuse and human ordure."

We trust, that in a second edition, Dr. Lyons will devote somewhat more attention to the etiology of fevers, than he does in the present; and we feel convinced that, if he does, he will be enabled to express himself more decidedly, on what to him is still a doubtful question.

As a consequence of the unsettled state of Dr. Lyons's mind on this most important matter, we would refer to his remarks on the subject of intestinal ulceration.

> "As the result," he observes, "of a very large experience in the pathology and pathological anatomy of both typhus and typhoid fevers, I may be permitted to state it as my conviction, that any true follicular lesion of the intestine is as rare in typhus as it is common in typhoid fever."

In the same page, ulcerations of the intestines are spoken of as occurring in five per cent. of the cases of true typhus. But we would ask, what is *typhus* with "follicular lesion of the intestine"? Truly, there is here some confusion; and it is to be regretted that Dr. Lyons has furnished us with no particulars, or details of cases, to enable us to understand statements, which, for the present, we must confess to be quite unintelligible.

Dr. Lyons, we are glad to observe, recognises the distinctions between the rubeoloid eruption of typhus and the rose-coloured spots of typhoid, and gives a very accurate description of both. We object, however, to the term *petechiæ* being applied to the typhus eruption, as tending to create confusion. The eruption of typhus, in its early stage, does not consist of petechiæ; although many of the spots, as the disease advances, may become converted into petechiæ. True petechiæ, or subcutaneous extravasations of blood, may occur in typhoid, or, indeed, in bad cases of any form of fever. The spots, in both typhus and typhoid fever, according to Dr. Lyons, disappear on pressure, reappearing instantly when the pressure is removed. We are generally told that the eruption of typhus does not disappear on pressure, while that of typhoid fever does. Dr. Lyons is, to a certain extent, right in exposing the fallacy of such a distinction. The rubeoloid eruption of typhus, in its early stage, disappears upon pressure, as readily as do the rose-coloured spots of typhoid fever; but, in its advanced stage, when, in fact, the spots become converted into petechiæ, it no longer disappears on pressure.

But, although on these, and on some other points, we are disposed to be somewhat critical on the opinions expressed in the works before us, we do not wish to conceal that it constitutes an excellent digest of our present knowledge on the subject of fever, that it enunciates certain opinions, and enumerates not a few facts, of great interest to those who have made fever their special study, and that the treatment recommended in it is eminently sound and practical.

We quite agree with the author that the so-called "typhoid matter" may, in certain rare cases, be eliminated by absorption from Peyer's patches, and from the solitary glands, without any ulceration taking place. We cannot, however, subscribe to the statement that this "typhoid matter" is "entirely incapable of undergoing any process of cell-formation. Nucleated cells occurring in typhoid deposits have been described and figured by Vogel, Wedl, Bennett, and others; although doubts may exist whether these cells may be new formations, or merely modifications of the normal cellular elements of the intestinal glands, as suggested by Virchow.

The following excellent remarks occur under the head of Treatment:—

> "Thus, while I believe it may be said with truth, that we can *cure* many inflammations by the intervention of our art, the same cannot be affirmed of fevers. In fevers, the highest efforts of our art, the most delicate care, the most refined skill, the most nice appreciation and adaptation of means to ends, which we can command, must be all directed to watching, supporting, maintaining, and, it may be, stimulating the system, till the fever-storm shall have passed over it."

The following remarks on the administration of stimulants in true typhus fever will be interesting to some of our readers:—

> "In general, it may be said that it is both safe and judicious practice to exhibit wine (in small quantities at first) on the seventh or eighth day of the disease. . . . It is impossible to state what quantity of wine will be required in different cases; but we may commence with from three to six ounces as a general rule. In private practice, and in families where we know the price of wine is not a matter of consideration, the higher class of French wines may be used with great advantage in the and second weeks of typhus; they produce an exhilarating effect, without exciting the heart or brain. Lafitte and Chateaux Margaux are excellent for this purpose. Sherry and Madeira are useful, and must be employed where early sinking is imminent. Port answers the same purpose, but is heavier on the stomach. The effervescent wines, whether French or Rhenish, are very refreshing, and especially useful where thirst is much complained of. . . . . When the case is *in extremis*, the best wine is but a poor substitute for sound brandy or whiskey punch, which must be given *ad libitum*."

We are glad to observe that Dr. Lyons draws a marked distinction between typhus and typhoid fever, in reference to the necessity for stimulation; and that he objects to the indiscriminate employment of stimulants, without any regard to the form of fever, practised by some physicians at the present day. He observes:

> "Failure of the circulation is not one of the dangers we have to anticipate and guard against, in typhoid, at an early stage. Consequently, stimulants, such as wine, brandy, spirits, ether, ammonia, and the like, are not called for in the first and second weeks, as in typhus." And again: "Wine and other spirituous stimulants are of but doubtful use in typhoid fevers."

Chapter VIII, which is supplementary to the remarks upon continued fevers, gives an account of typhoid fever, as observed in the British army in the Crimea, and contains a tabular analysis of the clinical history and *post mortem* appearances of forty cases.

Space will not permit us to enter into a consideration of Dr. Lyons's excellent investigations, as to the pathology of Yellow Fever. We shall content ourselves by calling attention to the fact, that as the result of numerous *post mortem* examinations, conducted with great care, the conclusion is arrived at, that the most constant lesion after death from yellow fever is fatty degeneration of the liver. In connection with this, it is interesting to notice that cases are every now and then occurring in this country of typhoid jaundice, with symptoms approximating to those of typhoid fever, where the sole *post mortem* lesion is advanced fatty degeneration of the liver.

We have great pleasure in recommending Dr. Lyons's work on *Fever* to the attention of the profession. It is a work which cannot fail to enhance the author's previous well-earned reputation, as a diligent, careful, and accurate observer.

Dairy Stock: its Selection, Diseases, and Produce, etc. By John Gamgee, Professor in the New Veterinary College. Pp. 316. Edinburgh. 1861.

Those of our readers who rejoice in the luxury of a dairy will find this volume a very useful aid in carrying it on. Mr. Gamgee treats his subject in a philosophical style, and is evidently thoroughly master of the nature of the diseases of cattle—that is, as far as it is at present given to human wit to be masters of the nature of retrograde and other pathological metamorphoses. He teaches us also how to choose our stock, as well as how to manage them. Some of our readers may be surprised to hear that he has a chapter on the Roman Bath, all for the benefit of cattle; and perhaps still more to be told that "a committee was once appointed by the Royal Agricultural Society of Ireland to inquire into the utility of the Turkish Bath for the cure of distemper in cattle". Surely here is a hint for the Royal Medical and Chirurgical Society of London.

DR. BROWN-SÉQUARD'S

GULSTONIAN LECTURES

ON THE

DIAGNOSTIC VALUE AND MODES OF PRODUCTION OF THE VARIOUS SYMPTOMS OF DISEASES OF THE BRAIN.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY, 1861.

The fourth lecture was delivered on Friday, February 15th. Its object was the demonstration of a position already laid down—that the symptoms attending an injury of the brain itself may be not only direct results, but may be produced by the same kind of influence as that which gives rise to them in injuries or diseases of distant parts; *i. e.*, reflex action.

Injuries or diseases of the brain act either on the whole or on part of the organ; and it is important to bear this distinction in mind. Of those which affect the entire encephalon, some act by pressure, some by reflex action.

Examples of injuries acting on the whole encephalon by pressure are afforded in cases of fracture of the skull, which may either, from its extent, press on the whole brain-mass, or may give rise to inflammation and serous effusion or hæmorrhage, thus also causing pressure. The symptoms of this condition are well known—somnolence, impairment of the mental faculties, diminished pulse, and heavy and laboured breathing. Another cause of general pressure is found in obstructions to the return of venous blood from the brain. But the most frequent cause is inflammation of the membranes of the brain, and the consequent effusion of fluid into them; the ventricles, one or both, may also be filled with fluid, so as to produce symptoms of pressure. Other causes are presented in diffuse cortical encephalitis; in œdema of the brain from pressure on its veins; in hypertrophy of the brain, whether of its proper substance or of its connective tissue; and in tumours which, though developed in one part, may press on the whole encephalon.

The symptoms under the conditions now enumerated are generally much the same; yet there is a distinction between those arising from inflammation of the meninges and those due to inflammation of the brain-substance itself. When the membranes are inflamed, there are reflex symptoms—tremblings, convulsions, rigidity of certain muscles, etc.; but, when the inflammation is in the brain itself, the symptoms, though still denoting irritation, are manifested less in abnormal actions of the muscles than in the development of referred sensations in parts of the body communicating with that part of the encephalon in which the irritation exists. Referred sensations may also be produced by inflammation of the sheaths of the nerves at their exit from the base of the skull; here, however, they will be confined to the face and neck; while, when they arise from inflammation of the brain, they will be felt in the trunk and limbs—the face perhaps not being affected.

The results of general affection of the brain are also produced by arterial congestions; which give rise to symptoms similar to those of inflammation, but less intense. The same occurs in anæmia, in which state we may meet with convulsions. This has been long known, principally through the labours of medical men in this country; but the great frequency of convulsions in connexion with anæmia has been first demonstrated by Kussmaul and Tenner. Atrophy of the brain may also produce general symptoms.

Remarkable phenomena are often to be observed in inflammation of either of the membranes of the brain. In cases of this kind, symptoms of irritation—convulsive actions of muscles—often occur before any effusion takes place; and, if the patient die (it may be from some intercurrent disease), there is no effusion found. But, again, it not unfrequently happens that, after a meningitis has run its course, presenting all the phenomena of pressure, these disappear, and may reappear a second time. Their disappearance is most likely due to the absorption of the fluid part of the effusion. Their reappearance is at first sight difficult of explanation, as after death no fluid may be found; yet it is very probable that the fluid, after its removal by absorption, has been rapidly re-secreted, and has been again absorbed after death; and this view is borne out by the result of some experiments of Dr. Brown-Séquard, in which fluid, thrown into the cavities of the meninges in animals, has been removed by absorption within a short time after death has taken place.

The diagnosis of the local affections of the brain is more easy than that of the general. They may produce either the phenomena of direct local pressure, or may affect the motor, the sensory, or the vaso-motor nerves of distant parts. If the vaso-motor nerves be affected, there is paralysis of the part, and perhaps also disturbed nutrition. Local disorder of the brain may also affect the pulse and the breathing. The effects on the pulse vary according to the part which is the seat of the irritation. Diminution of the pulse may arise from irritation of the pons Varolii, or of the medulla oblongata, in the same manner as occurs when the par vagum is irritated.

Local cerebral affections also produce reflex phenomena. There are not a sufficient number of facts to show how this occurs; but it is most likely through the agency of the nerves which accompany the blood-vessels of the brain. Without admitting some such influence, it is impossible to explain all the phenomena attending local diseases of the brain. For instance, paralysis of the facial nerve has been found to attend alterations in structure of any part of the brain—a circumstance which cannot be accounted for by direct pressure, even allowing that this is present in some cases. Besides, how is it possible, on the pressure-theory, to account for the fact that the orbicularis muscle, in these cases of facial paralysis, generally remains unaffected? Again, the facial nerve is comparatively small, and certainly its fibres do not extend through a great extent of the brain, so as to be subjected to pressure wherever applied.

The lecturer next proceeded to point out the diagnostic value of the symptoms observed in the diseases of the parts at the base of the encephalon. A very important observation has been made—that all the nerves entering the brain through the base of the skull decussate near their entrance into the encephalon; and, after the decussation, most of them send fibres upwards into the brain. Knowing this, we may first determine theoretically what symptoms should be produced by injury of a given part; and then examine how far this theory of symptoms agrees with what is actually observed.

With the exception of the auditory nerve, the cranial nerves springing from the *medulla oblongata* have their origin at the back rather than at the front of this part of the encephalon. All these nerves pass into the grey matter, and there undergo partial decussation. To illustrate the effects of disease on these, according to its seat, the lecturer selected the sixth nerve.

Disease affecting the medulla just at the origin of the sixth nerve on one side will produce paralysis of the external rectus on the same side as the injury; while there will be paralysis of the opposite side of the body. This agrees with what is observed in practice. But if it be inflammation that affects the origin of the sixth nerve, there will be convulsive action of the muscle supplied by it, and the eye will be drawn outwards. Again, if this nerve be injured after its decussation in the pons Varolii, the external rectus of the other side is paralysed; and the paralysis of the muscle of the eye here occurs on the same side as the general paralysis of the body and limbs. In another class of cases, there may be an injury on one side, small in extent, yet near enough to the point of decussation to affect the nerves on both sides. Here there will be paralysis of both external recti, although one side only of the body is paralysed.

Analogous phenomena are observed when other of the cranial nerves are affected. The phenomena of "alternate paralysis" (paralysis affecting partly one side of the body and partly the other) have lately been made the subject of a paper by M. Gubler. M. Brown-Séquard, however, had given an explanation of the fact ten years ago; and even then he did not think he was advancing any new doctrine. The phenomena had also been explained by Romberg and others prior to the appearance of M. Gubler's essay. M. Gubler has collected cases of injury at the lower part of the *pons Varolii*, affecting the facial and trigeminal nerves, and producing paralysis of the parts supplied by these nerves on the same side; while the opposite side of the body has been paralysed. It would appear, however, that M. Gubler has drawn too general a conclusion from these facts; for, if the injury be at the level of the decussation of the nerves, then the paralysis of the parts supplied by them occurs on both sides. Two cases of this kind have been recorded. Again, injury of the pons above the point of decussation of these nerves will produce paralysis of the face on the opposite side—on the same side as that on which the general paralysis of the body occurs.

The effect of injury of the pons Varolii in producing paralysis of the cranial nerves then varies according to its situation. When the injury is below the point of decussation, the paralysis is on the same side; when it is above, the paralysis is on the opposite side; and when it is between these, so as to affect the nerves just where they decussate, the paralysis of the parts supplied by the nerves involved occurs on both sides.

Are, then, these signs sufficient for the positive diagnosis of paralysis originating in injury of the pons Varolii? No; but there are other symptoms which aid in the diagnosis.

If the injury of the pons be produced rapidly, as by effusion of blood, the breathing will soon be affected. Again, in the paralysed parts there is a remarkable diminution of temperature; and, as a general rule, the presence of an irritation in the pons and perhaps in some part of the medulla oblongata, is denoted by a considerable loss of heat on one side of the body. If, however, there be no irritation, the temperature in the paralysed limbs will be increased. Again, if there be paralysis of the muscles of the eye, attended with constriction of the pupil, there is an irritation somewhere; and, if there be no other obvious source for this, it must be located in the pons. Further, in most cases of simple injury of the pons, the intelligence remains normal; and there is difficulty in deglutition, and in the motion of the tongue. It is remarkable, however, that it is only when the lower part of the pons Varolii is injured, that the function of the hypoglossal nerve is much impaired.

The small size of the *anterior pyramids* in the medulla oblongata at first sight renders it difficult to believe that they are the main channel of the motor fibres in their passage from the brain to the spinal cord. Yet injuries of other parts of the medulla do not paralyse; while an injury of the anterior pyramid of one side produces complete paralysis of motion of the opposite side of the body. Pathological facts also show that these anterior pyramids are the continuation of the lateral columns of the cord, and that a decussation takes place in them; for injury of the anterior columns of the cord just below the pyramids does not produce paralysis, while an injury of one lateral column produces paralysis of the body on the same side. The fact of a decussation of motor fibres in the anterior pyramids is also shown in the result of injury of the pons Varolii. If decussation of the nervous fibres did not take place before their entrance into this part, then injury of one side of the pons ought to produce paralysis of the same side of the body; whereas the contrary occurs, as has been shown in sixty or seventy cases.

The symptoms of irritation in the pons and medulla often manifest themselves in the form of convulsions. But it does not follow, because the convulsions may be epileptiform, that the actual seat of epilepsy is here. The medulla is only the starting-point of an irritation; the seat of the epilepsy may vary. The first convulsions are observed to occur sometimes in one and sometimes in another muscle; and occasionally the first result of the irritation is contraction of the blood-vessels of the brain, producing loss of consciousness.

British Medical Journal.

SATURDAY, MARCH 2nd, 1861.

THE TURKISH-ROMAN BATH: WHAT ARE ITS RIGHT USES?

The Turkish bath has lately undergone some investigation before a proper tribunal—the Medical Society; and, indeed, it is high time that it excited in the profession the attention it demands as an article of hygiene. The subject was introduced to the Society by Dr. Thudichum, who fully explained, according to his personal experience, the physiological action of the bath upon the body human. His interesting and original observations on this point will be found in the fifth number of the Journal for this year. But Dr. Thudichum was not only philosophic in his details; he was also enthusiastic in his praises of the bath. Dr. Richardson, whose remarks will be found in the same Journal, happily took a more moderate view of this calorific instrument. We think his observations on the subject to be full of reason, good sense, and sound philosophy. It is, indeed, high time that the Turkish bath mania were subjected to some proper control and authoritative criticism. That non-medical enthusiasts and lively speculators should bedaub a good thing with immoderate laudation, is readily comprehensible, and of every day occurrence; but we must express surprise that cool-headed men, such as the members of our profession are supposed to be, should indulge in flights of imagination on the Turkish bath, of the kind we find in pamphlets which have reached us from the east, the west, and the antipodes.

The hot-air bath is manifestly, and as we find shown in the experiments of Dr. Thudichum, an agent exerting great influence over the animal economy; and, regarding it as such, it is clear that it cannot be indifferently applicable to the body in health and in disease. This plain fact seems to have been overlooked by its enthusiastic admirers; and Dr. Thudichum and Dr. Richardson have, therefore, done well in reducing the effects of the bath to their simplest terms, by telling us what are the changes caused in the body—the material products—the metamorphoses—resulting from its action. From their experiments, it seems to us to be a necessary consequence that the bath must be injurious to a person in health, in consequence of the unnatural waste of the body thereby excited.

There is a moral aspect, also, from which this new luxury may be viewed; and one not very favourable to its use. The bath may be regarded as an accompaniment to luxurious living. By the aid of this instrument, the *Epicuri de grege porci* may be enabled still to gratify their palates, and whip their palled stomachs into something like a real though temporary gastric movement. And, if we are to regard the bath as a thing necessary to us all, then we must consider that the body, in these days of exalted civilisation and high living and mental activity, is never in a state of health; and that there is, as a consequence, a certain amount of improper materials always present in the blood. But what kind of a philosophy is this, which would tell us how to patch up our body, in order to enable it still further to sin against the gastronomic laws? A wise medicine would rather point out the erroneous causes which have brought the body to such a degraded position. In this point of view, the bath must be regarded as an agreeable encouragement to the agreeable sensuality coincident with an unnatural indulgence of the gastronomic appetite.

But this surely is not the way to teach us how to reach the natural age assigned to man by nature—the 100 years predicated by M. Flourens. Our conclusion is, that the bath used, as here described, becomes an instrument of the degradation, mental and physical, of the human species; and that a man in health who fritters away his time, and dissipates his tissues, in the *mollesse* of a Turkish bath, commits something like an act of genteel debauchery. And such, we believe, is the conclusion to which a consideration of the uses, the abuses, and the results of the bath will inevitably lead the unprejudiced observer. Surely, it can be hardly worth while to praise a process which, as far as man in health is concerned, seems only fitted for the purpose of relieving him, by a pleasant and easy method, from the hypothetical accumulation of *luxus-urea* in the blood—the evil consequences which naturally result from excessive eating and drinking.

But, as a therapeutic agent, the bath is, undoubtedly worthy of much praise; and, certainly, we needed not this Turkish sudatory to tell us of the virtues of hot air, as applied to the external surface of the body in disease. We may, nevertheless, gladly avail ourselves of it as an extended and ready means of applying the agent. Gladly would we see the bath taken up by our hospitals; its general adoption in these institutions would not only be highly serviceable to the sick, but would at once put it in its right place as a remedial agent, and be a proclamation to the world of the opinion of our profession regarding its uses and applicability. And we may observe that the members of the Medical Society, who remarked upon Dr. Thudichum's statements, had not so favourable an opinion of the innocuity of the bath as Dr. Thudichum himself seems to hold. What is now wanting is a series of careful observations upon the effects of hot air in the case of individuals suffering from different diseases; and there is abundance of evidence of the value of the bath as a powerful remedial agent, to justify, or rather to oblige, our large medical institutions to make the Turkish bath an important item of their instruments of cure.

As a therapeutic instrument, then, the bath should be regarded. Our physiological and pathological ideas must undergo considerable change before we can be brought to the belief, that it is either desirable or necessary for a man in health, who lives a decent life, and performs his ablutions as a Christian should, to undergo the sudatorial and pulmonic purgation of an hebdomadal Turkish bath. The proceeding may be adapted to the mental and physical constitution of those lazy Eastern voluptuaries, who have cost us so much trouble and so many lives, and the well-fed and fatted contents of their harems. The slothful pasha may work off his superfluous hydrocarbons and nitrogenous materials through the sudoriferous ducts and the pulmonary mucous membrane; but healthy men of business and of sense in this country will, we venture to prophesy, never consent to the dissipation of time and matter involved in the idea of a periodical Turkish bath. At all events, as Doctors of the healing art, it is our duty at this time to step forward and tell the public what this bath really is, in its properties—whether it is a proper article of daily service, like food and drink, whether it is solely a therapeutic agent, or whether it is likely to degenerate into an appendix to civilised sensuality.

CONVALESCENTS AND INCURABLES.

We have already called attention to the subject of the relief of the poor afflicted with incurable diseases; and we take the present opportunity of again bringing the subject before the attention of our medical brethren.

Those who have had much to do with the treatment of the sick poor know well, and must have frequently deplored, the want of any adequate provision, in our large centres of population, for the reestablishment of convalescence in cases of remediable disease, and for the comfort of those who are smitten with chronic and incurable maladies. We have placed both these subjects side by side, not with the intention of discussing both within the limits of a single article, but for the purpose of leading thoughtful men to reflect on the close connexion that subsists between them, and to inquire whether, if suitable provision were made for convalescents, the list of chronic and incurable diseases would not be immensely curtailed. Suggesting to our readers for their serious consideration, in its economical as well as its sanitary aspects, the important question, whether many diseases treated in our hospitals and dispensaries do not become chronic and incurable simply from the want of country air and good feeding, and promising to enter more fully hereafter on this wide department of preventive medicine, we beg the favourable attention of all who are interested in the alleviation of distress, to a few remarks on the praiseworthy efforts now being made to ameliorate the condition of the incurable inmates of our union workhouses.

For some time past, a few ladies, following in the hallowed footsteps of John Howard, Elizabeth Fry, and Sarah Martin, have been unobtrusively engaged in seeking the temporal and spiritual welfare of the sick inmates of the union workhouses of England and Wales. Forsaking the amusements of fashionable life, and undeterred by the scenes of wretchedness into the midst of which their labour of love often summons them, they have already succeeded in effecting a large amount of good, have cheered with the tender offices of Christian sympathy the hearts of many who had fancied themselves forgotten by the busy world, and have given substantial proofs of their wish to alleviate, by creature comforts, the sufferings of those whose short remaining period of life would otherwise have been embittered by many privations. In an admirable paper, written by Miss Elliot and Miss Cobbe, and read before the Social Science Association, at Glasgow, it is stated that "the number of persons who die annually in England of cancer is upwards of 5,500; of dropsy, 9,800; of tubercular diseases, 64,000; in all, of these three types of disease alone, more than 80,000. Of these, we must presume an immense proportion, say two-thirds, or 50,000, to have belonged to the class of the *incurable poor*." Of these, no doubt, many die in hospitals, "but how vast must be the number of those who spend their last days in extreme misery, either as a burden to poor relations, or as paupers in their respective workhouses. It appears, from the *Medical Directory* for 1860, that while, exclusive of dispensaries, there are in England and Wales "270 hospitals for *curable* patients," there are in England only *one*, and in Scotland *two* hospitals for *incurable* cases.

To provide hospitals for all the incurables would be a task of gigantic magnitude; and, setting aside the question of its feasibility, we doubt whether it would be right in principle to attempt it by private effort. There is no class of unfortunates, not even lunatics, who are, by common consent, a rent-charge on the commonwealth, more thoroughly worthy of a nation's sympathy and tender care, than these who, *through no fault of their own*, are stricken with the two sore trials of poverty and hopeless disease. In such cases (and their name is legion) "no shadow of blame or shame attaches to the sufferer." But let us not be misunderstood. We would not breathe a whisper of doubt as to the propriety and usefulness of that admirable institution, the Royal Hospital for Incurables. For a large number of patients who would not, under any conditions, seek refuge in the union infirmaries, such establishments are urgently required; and we hope to see the example of Dr. Reed and his coadjutors speedily followed in the large provincial towns throughout the kingdom. But when all has been done that can be done in this direction—when the *units* have been provided for, the *hundreds* must be received into the infirmaries as now. What is their condition, we do not say in all, but in far too many workhouses? Let our authoresses speak for themselves on this point:—

"At the present moment, according to the ordinary Poor-law regulations, the condition of these suffering creatures is in no respect equal to that of curable patients in hospitals. They have, as a rule, far worse beds, worse rooms, worse nurses, if, indeed, the rough, stupid, and often half-drunken paupers who attend on them deserve to be called *nurses* at all. Medicine, food, and drink, are all on the lowest scale, even when they are so fortunate as to possess a kindly and conscientious surgeon, who does what lies in his power to improve them. It is the nearly universal practice of the boards of guardians (with a few honourable exceptions) to 'lump' the surgeon's salary with the drugs he is to order for the patients; and the demand for employment in the medical profession is so great, that they are enabled to obtain the services of qualified surgeons" [shame on us, that such a statement can be made with truth] "for sums which would be wholly inadequate as salaries, did they *not* include any other expenses. . . . . Again, as to food: if he order any beside the soup and perpetual boiled beef, which three-quarters of the patients can neither masticate nor digest, there is no hospital cook or kitchen for the preparation of anything more suitable to invalids. The tea . . . . is generally such a mockery of the name, that the first entreaty of the sick to a charitable visitor is sure to be for a little real tea, instead of the stuff bought at two shillings a pound, and mixed with such an overwhelming proportion of water (and sometimes soda) as to make it utterly nauseous. For lemonade or fruit for parched and fevered lips, they are things unheard of in a workhouse; and to expect that a surgeon would order them, is hopeless. . . . Air-beds for the bed-ridden, whose skin is often frightfully excoriated by the hard, bad mattresses; cushions for those who have sores; arm-chairs for those who can never lie down, oppressed by dropsy, or choking with pulmonary complaints;—all these comforts (we might almost say *necessaries*) for the sick are, as a rule, unattainable."

They *are* necessaries for the sick; yet, if any workhouse surgeon were to order them, in nine cases out of ten the probability is that the guardians would treat him as the guardians of Islington, to his honour and their own disgrace, treated Dr. Semple. *Ex pede Herculem.*

After having long fought their own way, unaided except by a few noblemen and gentlemen whose names are identified with most of the philanthropic undertakings of the present age; and having been kindly welcomed by a certain number of boards of guardians, the members of the Workhouse Visiting Society invited some members of the medical profession to meet them at 3, Waterloo Place, on Wednesday evening (27th ult.), to consider and discuss a variety of propositions. Lord Shaftesbury occupied the chair; and it was unanimously resolved, among other things, to aim at having persons affected with chronic diseases, such as dropsy, consumption, or cancer, placed in wards especially allotted to them; these to be called the wards for male and female incurables. It was also considered most desirable that, in these particular wards, private charity be permitted to introduce whatever may tend to alleviate the sufferings of the inmates. We need scarcely say that we heartily concur in this expression of opinion, and wish those God-speed who are labouring to effect so beneficial a change. We hope to be able before long to advert to the other propositions submitted to and adopted by the meeting.

Observers of the times will not fail to note the interesting and hopeful sign, that the eyes of many are gradually opening to the distinction, long familiarly known in North Britain, between "God's poor and the devil's poor". The Bible rule is, that "if any man will not work, neither should he eat". The English law admits the right of every person in want to relief, irrespective of the cause of his distress. The unchecked operation of this principle under the old law wrought such havoc throughout the country, that the Poor-law Amendment Act created the workhouse-test, to prevent the lazy and the profligate from availing themselves of their natural right. It turns out that the *mauvais sujet* accepts the test, while multitudes of the deserving poor are repelled by it. Another great defect in the English Poor-law is its unbending rigidity. With the stern uniformity of an iron machine, it subjects to the same harsh *régime* the most worthy and the most worthless. We hail the attempt now being made by the Workhouse Visiting Society to introduce an element of unbought human sympathy and beneficence into those cheerless abodes of poverty, the union workhouses of England. Surely it is not unreasonable to maintain, with Misses Elliot and Cobbe, *that the destitute incurables in our workhouses should be treated, not as* PAUPERS, *but as* PATIENTS.

THE WEEK.

A case of considerable interest was last week brought under the notice of the House of Commons. Dr. Thompson, who was born in India—his father being an European pensioner, and his mother three-quarters white—had studied in the Medical College at Madras. He then came to England, took a degree at St. Andrews, and a diploma in surgery—his object all along being to enter the medical service of the Indian army. By the Act of last session, however, he was prevented from doing so, this service having been merged into the Queen's service. He, consequently, still pursuing his main object, presented himself at the competitive examination for the Queen's medical service; but was told by the medical inspector that he could not be admitted to the trial, notwithstanding that he produced certificates of physical capacity and the requisite professional acquirements. The chief reason alleged for the refusal appears to have been, that there were doubts whether Indians of native parentage were fit to be admitted into the general military service, because, being liable to be called on to serve in any part of the world, their physical constitutions might break down under the rigours of a northern climate, and thus the medical service be prejudiced. Now, we are bound to say, that we think great, extreme, hardship would be exercised towards this gentleman, if this idea were allowed to operate against him; and are glad that Mr. Baring promised that his case should be reconsidered. Whatever pretence there may be for supposing that the natives of India generally would break down under a northern sky, there can surely be none of a valid kind in this particular case of a gentleman who can stand our English winters. The point in question is one well worthy of consideration; and we should gladly hear what the grounds are upon which it is determined that even pure Indian natives are unable to bear cold climates, when *properly fed and clothed*. Most of us, in London, must be well acquainted with the sleek faces of certain Indians, who, in the capacity of street-sweepers, have successfully salamed for ten or twelve winters, at least, and are still in a fat flourishing state. We fancy our Arctic experience has taught us this, at all events: that man can live in any climate if he regulate his food and his garments by the rise and fall of the thermometer. That famous boast of Lord Palmerston's applied to a *Græculus Esuriens* as being a British subject—his *civis Romanus sum*—would, indeed, be a simple oratorical flourish, if a gentleman in the position of Dr. Thompson were excluded, on such pretences, from competing with his fellow medical *Cives Romani*. We trust we may shortly see his name in our pages as a successful competitor in the Æsculapian *Campus Martius* of our army.

THE very incorrect and annoying statements which have, from time to time, appeared in medical journals, concerning the result of operations performed upon Sir Benjamin Brodie's eye, have obliged that gentleman to address the following note to the editor of the *Times*:—

> "SIR,—Unwilling as I am to obtrude my private concerns on the notice of the public, I nevertheless venture to ask you to allow me to refer to a paragraph contained in *The Times* of to-day, copied from a medical journal, which may give unnecessary pain to my relatives and friends at a distance. The statement which it contains is wholly inaccurate; the writer of it having evidently been altogether misinformed, both as to my present condition, and, as I believe, as to my future prospects.
>
> "I am, sir, your obedient servant,
>
> "14, Savile-row, Feb. 21." "B. C. BRODIE.

We have much pleasure in adding to this note, which was written a week ago, the fact that Sir B. Brodie's sight has improved, and continues to improve. We have seen a note written by him within the last few days, and hear that he now readily finds his way about his house.

THE medical profession in Paris has just lost one of its most rising members, in the death of Dr. Aran, physician to the St. Antoine Hospital, and *agrégé* professor in the Faculty of Medicine. He died on Friday (yesterday) week, at the early age of 44, after a few days illness, of rheumatism, complicated with cerebral disease. M. Aran had earned for himself an honourable position among his brethren, by his researches and writings on various pathological and therapeutical subjects.

BARON SEUTIN, an honoured medical man in the Belgian Chamber of Deputies, lately spoke out loudly in the Chamber against the neglect shown to country practitioners in the distribution of honours.

> "Courage," he said, "is always to be honoured; but I maintain that the village doctor, in braving cholera and typhus, shows greater courage than the soldier and the civic guard, who are so frequently decorated. I do not reproach the minister; but I believe that his friends around him do not point out to him, as they ought, the services rendered by country doctors. They are exposed to all rigours of the season, and it may be truly said that no profession is more painful than theirs. How can you, then, hope to encourage this profession, if you pass over, in such complete silence, those who show so much devotion and self-denial?"

WE recommend the following fact to the attention of those who, for wet-nursing or any other purpose, unnecessarily separate the mother from her child:—

> "In the quarter just ended, notwithstanding the unprecedented distress which has prevailed at Coventry, owing to the utter prostration of the ribbon trade, the rate of mortality has been extremely low. So wonderfully, indeed, did it fall, that the deaths, which in 1857 had been 100, in 1858 98, and 1859 132, actually dropped during the misery of 1860 to 67! This is extraordinary; but the comment of the Registrar-General is more remarkable still:—'The neglect of their homes by mothers at work in these manufactures is apparently more fatal than starvation.' In other words, as women could no longer go out to work, since work had ceased, they could stay at home and look after their children; and this natural superintendence saved more lives than famine destroyed."

M. Bouchardat also tells us that the mortality amongst the *enfans trouvés* in Paris is frightful.

Special Correspondence.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

AT the last meeting of our Branch, a paper was read by Dr. Wade on Puerperal Obstruction of the Pulmonary Artery, in which, after detailing the views of Virchow upon this important subject, the author related a case where he had, chiefly by means of these views, been enabled to diagnose the existence of a pulmonary clot ten days before death, the accuracy of the diagnosis having been afterwards established by dissection. Mr. Clayton made some very interesting remarks upon Idiopathic Tetanus, and gave the particulars of two cases of this somewhat rare disease that he had been fortunate enough to meet with. Both these papers, however, will probably appear *in extenso* in your pages, and it is therefore undesirable to anticipate them further.

Chorea is a disorder which seems to find a congenial soil in Birmingham. It is by no means uncommon to see six or seven, or even more, cases in either hospital at one time. Thus a reference to the last statistical report of the General Hospital shows that seventy-six cases were treated there during the year ending midsummer 1860. This frequency of chorea generally attracts the attention of practitioners who, before coming to Birmingham, have been accustomed to look upon it as a somewhat uncommon disorder. Dr. Maxwell, the intelligent resident medical officer at the General Hospital, consequently found no difficulty in collecting thirty-five cases in which the well-known coexistence of rheumatism was ascertained. But it is certainly very remarkable that, with three or four exceptions, these cases were unselected, comprising, in fact, all that had been treated at the General Hospital in the last four months. Dr. Maxwell believes that a more searching investigation than is commonly instituted never fails to elicit a rheumatic history,—fever, arthritic pains, and sweating,—at some period of the nervous attack, or immediately before its commencement. He therefore holds that the connexion between the two disorders is an essential rather than an accidental one, being thus in accordance with the views of M. Sée and Dr. Todd. Nevertheless, further observations are necessary upon this point, since the last twelvemonth has been unusually productive of rheumatic fever; and we should, therefore, be prepared to find that the combination of the two disorders, even if an accidental one only, had been more than commonly frequent. Another fact of great interest as well as novelty, was the frequent localisation of chorea and rheumatism in the same limb, other parts being affected either not at all or in an inferior degree: this the author of the paper had frequently seen. He lauded arsenic as an antichoreic remedy,—a credit to which it is certainly entitled, since it undoubtedly cures some cases which have proved rebellious to other treatment.

Dr. Maxwell's paper was read at the last meeting but one of the Midland Medical Society, and its discussion occupied nearly all the last meeting without, however, eliciting any new facts. Now we are on this subject, it may be interesting to state the old routine treatment of the General Hospital, and which still remains without much change. Decoction of aloes (compound) was first given, thrice daily, in a quantity sufficient to move the bowels two or three times a day. This, together with the altered diet and confinement to bed, soon produced an amendment, and as long as this continued to be progressive no change was made. Sometimes, but rarely, a cure was thus affected; more often, the intestinal irritation, beneficial at first, seemed afterwards to produce an exacerbation. As soon, then, as the patient ceased to mend, one or two grains of sulphate of zinc were given thrice daily, in a convenient vehicle, the aloes being used from time to time if the bowels were costive. The dose of zinc was increased as often as the case seemed to be at a standstill, and it was found that it was rarely useful in a quantity much less than that required to produce nausea. The quantity thus given was sometimes very remarkable, delicate children taking upwards of half a drachm in the day without any unpleasant effect. The diet was liberal, but not excessive. When the zinc proved ineffectual, Fowler's solution was substituted for it. Dr. Wade, when house-physician, added to this plan the use of Indian hemp, as a means simply of allaying the movements when these were excessive; and this practice still maintains its ground.

Turning to surgery, we find that its conservative powers are sedulously developed in Birmingham practice. A striking example of this was shown by the adoption of excision for a recent gunshot wound of the knee, this being the third instance of such a procedure on record: the first was in the Crimea, by Dr. Lakin, formerly of Birmingham; the second in London. A youth of 19, holding a shot-loaded gun, with the muzzle close to the inside of the left knee, accidentally discharged it. The charge, of course undispersed, carried away the internal condyle of the femur, and injured the head of the tibia, leaving a large wound opening into the joint. Mr. Crompton (the senior surgeon of the General Hospital), under whose care he was admitted, considering the high mortality in primary amputation of the thigh, and duly estimating the superior advantage of an anchylosed knee over a wooden leg, determined to procure him the former if possible. The wound was made part of the incision, and the knife carried below the patella to make the usual semicircular section, a thin shaving of the ends of the tibia and femur was removed, and the ragged inner condyle dressed with the saw. The patella was left untouched, Mr. Crompton having found no ill from leaving the cartilage on the lower end of the tibia in Syme's amputation, when the ankle-joint itself was not implicated. A large number of shot-corns were found in the joint; the usual after-treatment was employed, and the patient now, two months after the operation, is well and hearty, with every prospect of a sound stiff joint. Resection of the knee, though an excellent operation, has its disadvantages; the leg must necessarily be shorter than its fellow, besides, it may cease to grow. Now a leg, however well anchylosed, which grows no more after the age of 14 or 15, can scarcely be other than an incumbrance. This cessation of growth depends mainly upon two causes: the removal of too much bone; and a want of sufficiently firm union to permit the limb of being freely exercised. These dangers are doubtless daily diminished by the increasingly matured experience of operators; but that is no argument against rendering them even less threatening. Now nature often secures or favours anchylosis—the great object of resection when applied to the knee—by spontaneous openings into the joint. Some surgeons—but as yet perhaps too few—imitate this by making artificial openings. An instance where this expedient was adopted by Mr. Crompton a few weeks ago, promises a satisfactory result. The patient, a female, has been ill for years with diseased knee. At the present time the openings into the joint have closed, and all swelling and pain have subsided; she got up for the first time on the 17th of February, the knee being supported by a gutta-percha splint, but has not yet had courage to try her leg. Mr. Goodall, the house-surgeon, believes that it is anchylosed, though he has not ascertained the fact. In another case, a boy, aged 17, who had been ill nine months, was admitted under Mr. Crompton in May 1859. There was then excessive pain, and violent constitutional disturbance from inflammation, which had come on rather suddenly not long before. Here again, instead of amputation, recourse was had to a free incision on either side of the knee; the finger passed into the joint found the cartilages nearly gone. The leg was put up as after an excision. The pain, and other unfavourable symptoms, were immediately relieved; and the poor fellow has now long had a strong, useful limb, of the same length as its fellow. Such results encourage imitation.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, February 4th, 1861.

B. G. Babington, M.D., President, in the Chair.

ON THE RECENT INTRODUCTION OF YELLOW FEVER INTO PORT ROYAL, JAMAICA. BY A. BRYSON, M.D., F.R.S.

After some introductory remarks with reference to the provisions and other stores on board ships of war, to the manner in which these are stowed in the hold and other parts of the vessel, and to the general condition of the decks, etc., Dr. Bryson commenced his paper by stating that H.M.S. *Icarus* was commissioned at Sheerness on November 23rd, 1859, for service within the tropics. Early in January 1860, the *Icarus* sailed from England, and arrived on the West India station in February. After visiting several ports in the Gulf of Mexico, the *Icarus* early in June 1860 was at Port au Prince, St. Domingo, three days, when she left for Port Royal, Jamaica, where she arrived on the 16th of the same month. On June 21st, she again put to sea, and anchored at the island of Ruatan on the 27th. On the passage between Port Royal and Ruatan, the first case of yellow fever occurred on board the *Icarus*, the subject of it being an officer who had led an irregular life while on shore at Jamaica. He was attacked on June 24th, and died on the 27th. Port Royal and Kingston, the only towns he visited in Jamaica, were, with the exception of sporadic cases, reported to be quite free from yellow fever. The disease, according to the surgeon of the ship, one of the most intelligent officers in the service, was clearly contracted on shore.

Leaving Ruatan on June 28th, and having again visited Port Royal, Jamaica, the *Icarus* returned to the Bay of Honduras, frequently anchoring, and remaining a day or two at Belize, Ruatan, Truxillo, and other places along the coast. On the 14th day of August, after having been at anchor for three days at Belize, she sailed for Truxillo, where she arrived on the 20th; and three days afterwards, the second case of yellow fever made its appearance; but, as eight weeks had elapsed since the death of the first, the one could have had no connexion with the other. Whether the patient had been on shore at Belize is not mentioned; but this case, which happened on August 23rd, was followed by others on the 27th, 28th, and 30th of the same month. Cases, of a less severe character, continued to occur up to September 16th, when the attacks became more numerous and more severe. Truxillo, where the *Icarus* was at this time at anchor, was free from yellow fever; but at Belize, which she had just before left, that disorder had been raging with great severity, and had within three weeks carried off 30 per cent. of the white population. The *Icarus* had free communication with the shore at Belize, where, doubtless, she contracted the disease.

On September 29th, the *Icarus* left the coast of Honduras, with many sick on board, and reached Port Royal, Jamaica, on October 9th. By this time, however, out of a crew numbering one hundred and twenty persons, eighty-two had been attacked by the scourge, and thirty-two had succumbed to it. The worst cases were as speedily as possible removed to the naval hospital at Port Royal, where five others subsequently died, raising the total mortality to 45 per cent. of the total number of attacks.

Notwithstanding the virulence of the fever and the loss of more than a fourth of the whole ship's company, it may be said that, up to this point, there is no absolute and incontrovertible proof that the disease was infectious; because, according to the views of those who deny that yellow fever can be propagated by infection, it may be assumed that its invasion of the *Icarus* was due to some noxious agent in the ship, or to an epidemic constitution of the atmosphere. Indeed, causes of the most extraordinary character have from time to time been adduced to explain the eruption and spread of yellow fever.

When the *Icarus* arrived at Port Royal, the inhabitants of the town, the troops in the barracks, and the crew of the stationary ship *Imaum*—in fact, the entire community for fifty miles round, whether on sea or on land, were, and had been for many months, in a state of good health; although, as previously noticed, sporadic cases of yellow fever were occasionally occurring among new comers.

The sick of the *Icarus* were conveyed from that ship in a pinnace sent from the *Imaum*, the crew of which also assisted the patients out of the boat and across the esplanade to the hospital. On the following day (Oct. 10th), the same boat's crew took the convalescents to the hospital; and the remainder of the crew, who had escaped the fever, to the *Marianne* quarantine hulk. On the 11th, the same boat's crew were further employed in removing personal luggage, dead men's effects, and other articles, from the *Icarus*, preparatory to her being cleared out. While engaged in these duties, twelve out of the fourteen boys who composed the crew went below, to avoid a heavy shower of rain, while the other two sheltered themselves under the boom-boat on the upper deck. On the fourteenth, or three days afterwards, as might have been expected, and was indeed predicted, one of the boys who had gone below was attacked with fever in the morning, and another in the afternoon of the same day. On the next day, six more were attacked, and on the day following that three others. All of these lads were sent to the naval hospital, where most of them perished.

Notwithstanding the lamentable results to the crew of the *Imaum's* boat, had the fever now ceased, it might still have been contended, by those who believe that yellow fever is solely due to terrestrial or atmospherical causes, that proof of infectious propagation was still wanting; for the boat's crew had all been on board the *Icarus*, and had been thus exposed to the same cause or causes which acted with such destructive force on the crew of that ship. By an easy effort of assumption, the attack of the *Imaum's* boys might (in the absence of further proof) have been referred to local agencies existing in the hold or in the surrounding atmosphere.

Unhappily for those who, subsequently to the events just narrated, fell victims to the disease, but fortunately for the cause of truth the progress of the disease did not terminate here. On October 17th, one of the *Imaum's* crew, who had not been on board the *Icarus*, although he had come into contact with some of her officers and their baggage on shore at the dockyard, was taken with yellow fever. On the 19th, four men in the *Imaum* were attacked; and on the 20th, two others. Several of these men were what is considered fully acclimated, and had not been out of the ship for some time previously. Soon the fever spread over the ship, attacking indiscriminately the old and the young, the acclimated and the unacclimated, until the cases amounted to thirty-eight, of which seventeen ended in death. Meanwhile, there being but little communication with the troops in barracks and the crews of other vessels in the harbour, these hitherto had entirely escaped the disease.

Some may be disposed to say, "It is not quite clear how the fever got on board the *Icarus;*" but there can be no mistake about its introduction into the *Imaum*. And, as if further, if possible, to determine its communicability and the necessity of adopting proper measures of isolation and segregation in such cases, it can be shown that the disorder was also propagated to the crews of two other vessels of war in Port Royal, viz., the *Hydra* and *Barracouta*. The *Hydra* was lying at Port Royal when the *Icarus* arrived there fever-stricken; and she immediately sent a boat with an officer and crew on board of her. The *Hydra's* boats were subsequently employed for two nights rowing guard round the *Icarus*. What direct communication there was between the two ships, beyond the boarding of the boat's crew, is not yet ascertained; but on the 12th of October, or three days after the arrival of the *Icarus*, a case of yellow fever occurred in the *Hydra*. On the following day (the 13th), the *Hydra* sailed for the coast of Central America; and on the 14th, the officer who had boarded the *Icarus* was the next seized. The fever now spread generally through the ship; and, in the course of about a week, she returned to Port Royal, having during her absence lost five of her crew, and a number of cases were still under treatment on board. With every appearance of the fever increasing if she remained in the warm latitudes, the *Hydra* was despatched to the northward, and she reached Halifax on November 13th, without a case on board; having, however, lost three other men on the passage.

With respect to the *Barracouta*, on October 19th, she arrived at Port Royal from the Havannah, with her crew in good health. On the 24th of the same month, one hundred and three supernumeraries, young men and boys belonging to the *Imaum*, all recently from England, and two persons who had been under treatment in the naval hospital for dysentery, were sent on board of her, that they might be removed from a locality that had now become unsafe. The supernumeraries were enjoined to hold no communication with the ship's company, and were separated as much as possible from them, on the supposition that the former might have brought with them the germs of the fever in their clothes or baggage.

Two days after the *Barracouta* left Port Royal on the way to Bermuda, two persons presented themselves with decided symptoms of yellow fever—one of them an engineer from the *Imaum*, the other a boy belonging to the *Barracouta*. The next day (Oct. 26th), two boys, who also had come from the *Imaum*, were attacked. On the 27th, two of the *Barracouta's* men were taken with fever. It being now evident that the disease had in reality invaded the ship's company, there was no longer necessity for keeping the supernumeraries apart from them. On the 28th, the vessel arrived at Bermuda; but the civil authorities, dreading a reintroduction of yellow fever among them, would not allow the sick to be landed. Supplies of fresh provisions, and of medicines and other necessaries, were, however, sent on board.

The *Barracouta*, therefore, sailed for Halifax on the 5th November, but being, on the afternoon of the same day, overtaken by a violent storm, which blew down the hurricane-house erected for the sick on deck, and thus exposed them to the wind and rain, it was resolved, most judiciously, after two days labouring in a heavy sea, and the ship rapidly drifting to leeward, to shape a course for England, rather than hazard the risk of running back into the tropics, when the fever would, in all probability, have broken out with renewed force. On the 25th November, the *Barracouta* arrived at Spithead, with only a few convalescents under treatment.

"It is thus," concluded Dr. Bryson, "as clear as evidence can well make it, that the crew of the *Icarus* brought the yellow fever to Port Royal; that they infected the boat's crew sent from the *Imaum* to remove the sick to the hospital; and that the *Imaum's* boat's crew next infected their shipmates, who had previously been in a state of perfect health. In the same manner, the sick of the *Icarus* communicated the fever to the boat's crew sent from the *Hydra*, who also subsequently infected their shipmates. Next, the crew of the *Barracouta* were infected by the supernumeraries sent from the *Imaum*.

"Thus, from one central focus, and within the short space of a few weeks, was the yellow fever radiated in three distinct and distant directions, establishing at each point a fresh nucleus of infection capable of propagating itself to all susceptible persons coming within the sphere of its influence, and furnishing another unequivocal and conclusive proof of the communicability of that disease."

Dr. Milroy could not, after hearing such a history as that detailed in Dr. Bryson's paper, come to any other conclusion than that the infective nature of the disease had, in the cases narrated, been established. He considered that Bancroft, and others of that school, were altogether wrong in rejecting unconditionally the doctrine of the infectious communication of yellow fever. He believed that even the timbers of a ship could be so imbued with the *materies morbi* of yellow fever, as to give rise to that disease for a considerable time after a sick crew had left the vessel. During the last ten years there had been many outbreaks of yellow fever in the naval squadron on the West Indian station; and it was, therefore, desirable to know if everything that could be done had been done to avert, or, at all events, to mitigate its ravages. He alluded more particularly to the overcrowding of crews on the lower decks of ships, instead of dispersing them over the ship, while in their hammocks. It appeared from Dr. Bryson's paper that boys, most probably unacclimated, were sent from the *Imaum* to board the *Icarus*, which he thought was a mistaken proceeding. There had been several instances in which the mere landing of the sick, even within the tropics, had been followed by a cessation of the fever; and this alternative he considered preferable to that of running the ship to the northward, which in some cases must be attended with inconvenience to the public service. He thought too much care could not be taken to prevent accumulation of filth below; as, independently of the foul emanations from such matter, the formation of sulphuretted hydrogen was favoured by the admixture with bilge-water under the limber-boards.

Dr. McWilliam observed that this most important and valuable paper of Dr. Bryson appeared to open up but little room for discussion among the members; for the facts detailed in it were so clearly and unequivocally established as to repel any attempt to question them. That the *Icarus* had come from Truxillo with yellow fever contracted at Belize into Port Royal, Jamaica, and that the same disease had been communicated by the *Icarus* to the *Imaum*, and to the *Hydra*, and from the *Imaum* to the *Barracouta*, could not well be disputed after what Dr. Bryson had related, except by those whose prejudices rendered them incapable of reasoning on the subject. The out-and-out anti-contagionists in respect to yellow fever were, as a class, diminishing; at all events, they were much less heard of now than formerly; but they were far from being extinct, and he, therefore, doubted with Dr. Bryson whether the events connected with the *Icarus* at Port Royal would, in some quarters, meet with a better fate than had befallen other equally convincing proofs, recorded in the annals of yellow fever —such as the introduction of that disease into the island of Ascension by the *Bann;* into Fernando Po by the *Etna;* and into Boa Vista by the *Eclair*—all of which, notwithstanding their conclusiveness, had, at times, been either altogether ignored, or misrepresented, by the suppression of truth, or the more than erroneous assumptions of those who, to account for an outbreak of yellow fever, invoke some incomprehensible hypothesis, such as the occurrence of a peculiar state of the atmosphere, limited (as they are bound to admit) to the locality where the disease prevailed, and to the exact period of its duration. In those days of free trade and unrestricted intercourse, quarantine was a word of evil sound and import; but the Epidemiological Society had for its object the discussion, not of commercial, but scientific questions, and he conceived it to be the duty of those in authority to mitigate, if they could not avert, calamities similar to those which had been related to them that evening. With every consideration for the possible inconvenience to the service from ships in the West Indies or elsewhere, when invaded by yellow fever, proceeding to a cool latitude, he should, with Dr. Bryson, wish to see that course adopted in preference to any other; but should circumstances of any kind prevent such a course being taken, nothing could interfere with precautionary measures being resorted to with the infected ship or ships. It would, most assuredly, relieve commanders-in-chief and other officers in command, as well as medical officers on distant stations, of much anxiety, doubt, and responsibility, if an order were issued from the authorities at home to the effect that, apart from the conflict of opinion with reference to the infectious or non-infectious nature of yellow fever, every ship at all seriously affected by that disorder should at once proceed to a colder climate, by which, as all experience has taught, the disease will, in a comparatively short time, be extinguished; and that, in the event of its being necessary to land the sick in a climate capable of maintaining yellow fever, measures of segregation of the sick from the healthy should be attended to, as well as of exposing them as much as possible to a free circulation of fresh air. He added that he should, at the next meeting, bring forward an account, by Dr. Kinnear, Deputy Inspector-General of Port Royal Hospital, of the events connected with the sick of the *Icarus* and *Imaum*, after being landed at the hospital, which would be found to confirm the facts and views of Dr. Bryson. There was, to Dr. McWilliam, one gratifying feature in the sad history of the fever to which all had listened with so much interest; that the documents relating to it, so clearly and honestly recorded, should have been so unreservedly made public through the medium of the Epidemiological Society. The time had been when the production of such reports, and the enunciation of views such as those to which these papers inevitably led, and at which Dr. Bryson and all present had arrived, might have entailed upon a medical officer persecution, or, in other words, neglect, the only kind of persecution which, even in those days, could in such a case be safely employed by even official authority.

Dr. Bryson, in reply to Dr. Milroy, said that the extension of yellow fever into countries previously free from it, supported on the large scale the view of its infectious nature. Contrary to the opinion of Dr. Milroy, he deprecated the plan of landing yellow fever crews at Barbadoes, or in any place where the disease could exist; and urged the vessel's proceeding to a cold latitude, as the only course affording the sick a chance of recovery. Dr. Bryson observed that far too much stress had been laid on filth, emanations from the hold, and over-crowding, as causes originating and spreading yellow fever, and also upon what was called acclimatisation in bestowing certain amount of defence against it. With regard to the effluvium from bilge-water in the holds, it was notorious that articles of silver, gold lace, etc., were constantly being blackened in officers' cabins from the evolution of sulphuretted hydrogen without prejudice to health. He was, however, no friend to offensive smells.

Dr. Mackay, from his experience on the coast of Brazil in H.M.S. *Cumberland*, concurred in the views taken by Dr. Bryson.

Dr. Babington thought running out of the tropics always desirable in cases such as those described by Dr. Bryson. On the assumption that yellow fever was, as he believed, an infectious disease, much might be done by proper segregation of the sick from the healthy; but efficient segregation was hardly possible in a ship.

After a few observations from Dr. Haward on the general doctrine of contagion and influence of the rainy season on the production of disease in the tropics, the meeting adjourned at the usual hour.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, February 12th, 1861.

F. C. Skey, Esq., F.R.S., President, in the Chair.

CONTRIBUTIONS TO THE SUBJECT OF COMPOUND FRACTURE: BEING AN ANALYSIS OF THREE HUNDRED AND TWO CASES. BY THOS. BRYANT, F.R.C.S.

The cases were all taken from the experience of Guy's Hospital within the last twenty years, the earlier ones having been collected from the records of the institution, and the author's own notes having furnished him with the particulars of every case admitted within its walls during the last seven years.

He then proceeded to the analysis of the whole number—302 cases:—

17 or 5.6 per cent. were of the thigh
193 or 63.9 „ „ leg
35 or 11.5 „ „ arm
57 or 18.8 „ „ forearm

11 out of the 17 cases of compound fracture of the thigh proved fatal, or 64.7 per cent. 74 out of 193 examples of compound fracture of the leg were fatal, or 38.3 per cent. 4 out of the 35 cases of compound fracture of the arm died, or 11.4 per cent. And 7, or 11.2 per cent. of the 57 cases of compound fracture of the forearm. Of the whole number of 302 cases, 96 were fatal, or 31.7 per cent.

A table then followed showing the causes of death in these 96 cases, from which it appeared that in cases subjected to amputation, pyæmia was twice as fatal as in others treated on conservative principles, and that exhaustion and gangrene were more common causes of death; that in cases treated on ordinary surgical conservative principles, delirium tremens and tetanus were more common causes of a fatal result.

Analysing the 17 examples of compound fracture of the thigh:—9 underwent primary amputation; 6 died, and 3 recovered. 1 underwent secondary amputation; fatal. 7 were treated on conservative principles; 4 died, and 3 recovered. 10 were thus treated by amputation, and 7 of these died, or 70 per cent. 7 were left to nature's efforts for repair, and of these 4 died, or 57 per cent.

Having given an outline of the fatal cases, the author went on to remark, first, *on the rarity of compound fracture of the thigh*, the accident bearing the proportion only of 5.6 per cent. to other cases involving the larger bones of the extremities. This fact, he stated, was well borne out by the experience of all surgeons.

The *excessive mortality of these cases* was the second point to which he alluded, 64 per cent. of the whole number of cases proving fatal. In nearly 60 per cent. amputation was had recourse to; and 70 per cent. of these cases subsequently sank. The extreme severity of the majority of these cases rendered primary amputation absolutely essential. More than half the examples died, or 57 per cent., in which attempts had been made to save the limb; and the cases in which recovery had taken place were in young and healthy subjects.

The author pointed out how Dupuytren, Hennen, Larrey, Guthrie, and others all agreed that in compound fracture of the thigh from gun-shot wounds, "in rejecting amputation, we lose more lives than we save limbs;" and also "that in the exceptional cases, which result in consolidation, the condition of the limb is not encouraging." He quoted Macleod's Crimean experience as indicating the same opinion; this surgeon advising amputation in all such cases when taking place in the middle and lower third of the thigh, and hesitating only in a like recommendation in cases of fracture of the upper third, on account of the extreme mortality of such amputations. Malgaigne's and Baudens' experience was then quoted to prove the poor success of conservative treatment in these injuries; the latter surgeon saving only 2 out of 25 cases, and these two retained useless and deformed limbs.

The experience of civil surgeons was not unlike that of their military brethren, although it was much more limited. The author expressed an opinion, which he believed to be generally entertained, that a satisfactory result can rarely be obtained by conservative treatment, except in the most favourable cases,—that is, when the subjects are young and the fracture uncomplicated; when the soft parts are not materially damaged, nor the bone comminuted. When the bone was comminuted and the soft parts seriously involved (such a condition being generally produced by local mechanical violence), he believed that a satisfactory termination of the case must be regarded with doubt. If the patient should be old or unhealthy, amputation should be at once performed; and if there should be a doubt as to which line of treatment to adopt, the safest is to decide on amputation. But if the subject should be a young and healthy one, and not subjected to injurious hygienic influences, the author believed that a satisfactory termination might be obtained by removing at once the broken and disconnected fragments of bone (enlarging the wound if necessary), and by maintaining the absolute repose which is so essential. He stated that he believed it to be a bad practice to leave the broken fragments in position, with the hope of union; and that by doing so we leave a constant source of irritation, which must retard the local process of repair, as well as seriously weaken the powers of the patient, a subsequent operation being almost necessarily required to remove what will become necrosed bone.

Analysis of the 193 cases of compound fracture of the leg. The author commenced by stating that these numbers included fractures of the tibia, and tibia and fibula combined, the latter being the most numerous. Compound fracture of the fibula was comparatively a rare accident. 129 were treated on conservative principles; 35 of which died, or 27.13 per cent. 32 underwent primary amputation of the leg; 19 of which died, or 59.37 per cent. 11 underwent primary amputation of the thigh; 6 of which died, or 55.55 per cent. 15 underwent secondary amputation of the leg; 10 of which died, or 66.66 per cent. 6 underwent secondary amputation of the thigh; 4 of which died, or 66.66 per cent. 74 of the whole number died, or 38.34 per cent.;—27.13 per cent. of those dying which were treated on conservative principles, and 60.9 per cent. of those treated by operative interference. In 22 per cent. primary amputation was performed; in 10 secondary; and in 67 per cent. conservative treatment was adopted.

A table was then given, showing the causes of death in the fatal examples, from which it appeared; that of the fatal cases operated on, about one-third died from pyæmia, and nearly two-thirds from exhaustion, or gangrene; that of the cases treated on conservative principles, not one-sixth died from pyæmia, and something less than half from exhaustion and gangrene; pyæmia being evidently a more common cause of death after operation.

No comparison can be well drawn between the two classes of cases in which conservative treatment and operative interference had been applied. In compound fracture of the leg, he believed that the injury should be very extensive to warrant such a practice as amputation; for most cases, whether treated by primary or secondary amputation, prove fatal to about sixty per cent.; and when attempts to save the limb are carried out, by care and close attention good results may be anticipated.

Let a free exit be made and kept up for the evacuation of all pus; let loose pieces of bone be removed as early as possible; and let the limb be preserved in absolute repose by any splints which will secure such an end. Let the tendo Achillis be divided if the slightest difficulty is experienced in maintaining rest, and good support and nourishment freely given. Under such treatment, apparently hopeless cases often turn out well, and reward the surgeon's attention by a successful result.

The author then dwelt at some little length upon the necessity of making free incisions whenever pus was present; it was a practice which he had never seen followed by any other than good results, and he strongly advocated its adoption in appropriate instances.

Analysis of the 35 cases of Compound Fracture of the Arm. 14 were treated on conservative principles, and all recovered. 4 were treated by primary amputation at the shoulder joint, 2 of which died from internal complications. 13 were treated by primary amputation of the arm, and 2 died. 4 were treated by secondary amputation and recovered. 31 of the whole number recovered, and 4 died, or 11.4 per cent.

Analysis of the 57 cases of Compound Fracture of the Bones of the Forearm. 27 were treated on conservative principles and all recovered. 22 were treated by primary amputation of the forearm; 2 died, or 9 per cent. 5 were treated by secondary amputation—4 of foreaam, 1 died; 1 of arm, fatal. 3 died from internal complications.

The author then drew attention to the fact of the favourable termination of these two last classes of cases, which the experience of all surgeons correctly indicated. He stated that such an operation as amputation should be resorted to only in the severest examples, and that in more favourable cases a good recovery might with some confidence be anticipated. He drew attention to the fact that so large a proportion as about 50 per cent. of the cases of compound fracture of the forearm admitted into Guy's Hospital were subjected to amputation, and explained it by proving that the majority of the cases were caused by machinery, which was too often followed by a total destruction of the part.

ON THE CAUSES OF TRUE LEPROSY.

BY W. E. C. NOURSE, F.R.C.S.

The author, having seen this disease at Bergen and elsewhere, adverted to the well-known fact that leprosy was a blood disease, or dyscrasia; that an altered condition of the blood, demonstrable by chemical analysis, accompanied the premonitory symptoms which preceded every fresh appearance of leprous blotches, both in the tubercular and in the anæsthetic form of leprosy, the blood at such times containing excess of albumen and fibrine; and that when the blotches were fully developed, the blood was found to be restored to its usual condition. Since, then, a changed condition of the blood was the proximate cause of leprosy, it was natural to look to the well-known agents concerned in making blood for the next link in the chain of causes of the disease. And here there was abundant evidence. Leprosy was frequent in Iceland, where the people inhabited small, close, dimly-lighted huts; were dirty in their personal habits; breathed a moist marine atmosphere; often had their garments wet; and lived on inferior food, badly cured. In Norway, where the food was inferior and too long kept, leprosy occurred; and on part of the west coast, where the food was unusually bad—where the people inhabited small, dirty, unventilated huts in damp and cold situations, and often had their garments drenched with rain or salt water—leprosy was peculiarly frequent. During the middle ages, when population had become too numerous to be sustained by the produce of the chase, and before the art of producing large supplies of good food was understood, leprosy had been common in all parts of Europe; and it had disappeared precisely as more copious and better supplies of fresh meat, vegetables, and bread were produced. It had then vanished first from England, then from Ireland and Scotland, and more recently from the Isles. On the Continent it had followed a similar rule; and the disease now only remained in particular maritime situations, where the standard of living was miserably low, the habits of the people dirty, and their dwellings small, dark, and ill-ventilated. The author believed that these conditions would always be found to coexist with it, and that it would be endemic wherever they obtained, irrespective of latitude. In Egypt, cases of leprosy were occasionally seen; and some of the Egyptians lived in a miserable squalid manner, and in small dirty huts. In Palestine, lepers were still found amongst the very poor, distinguished by want and dirt. Dr. Webster's account of the leprosy in Spain was precisely to the same effect, and he had shown that it prevailed in damp maritime districts, amongst people living in a poor miserable way, on bad and decaying food, and in close dirty huts. Mr. Nourse dwelt on these circumstances as the main causes originating the disease, and concluded by expressing his belief in its hereditary transmission.

ANALYSIS OF FIFTY-TWO CASES OF EPILEPSY OBSERVED BY THE AUTHOR. (SECOND SERIES.)

BY EDWARD H. SIEVEKING, M.D.

This was a second contribution of the same character as the one admitted into the *Transactions* of the Society for 1857, and the author has limited the analysis to the same number of cases, taken in the order of observation, as had been subjected to analysis on the former occasion. Only those points were brought forward on which satisfactory evidence could be obtained.

Sex. 23 were females, or 44.2 per cent. 29 were males, or 55.8 per cent. Taking the two series together, the ratio of females to males was as 45.2 to 54.8.

Age. The following was the distribution throughout the different periods of life:—Under 10 years, 12 cases; from 11 to 20, 25 cases; from 21 to 30, 7 cases; from 31 to 40, 3 cases; from 41 to 50, 2 cases; above 51, 3 cases. The basis of this calculation is the time at which the epilepsy first showed itself. Arranged according to sex, we find during the first decennium 8 males and 4 females; during the second, 11 males and 14 females; during the third, 5 males and 2 females; during the fourth, 3 males; during the fifth, 1 male and 1 female; during the sixth, 1 male and 2 females.

Causes. An hereditary taint was traceable in 14 cases, but in 8 only of these was there evidence of epilepsy having occurred in a near relative of the patient. The exciting causes were traced in 37 cases as follows:—Uterine derangement, 9 cases; venereal excesses, including masturbation, 6 cases; fright, 4 cases; over-work, 4 cases; anxiety, 3 cases; dyspepsia, 3 cases; dentition, 2 cases; scarlet-fever poison, 2 cases (doubtful); meningitis, anæmia, blood-poison, and the development of puberty, each 1 case.

Premonitory Symptoms. Comprising under the term "aura" all symptoms indicative of a near approach of a paroxysm, the author found it in 21 cases, or 40 per cent., or less frequently than it was met with in the first series, where 52 per cent of the cases exhibited premonitory signs.

Headache. Headache is very commonly associated with epilepsy, but its significance varies much according to its period of occurrence; it may be habitual, or it may be connected with the attacks only as a precursor or a sequela. It was constant or frequent in 9 cases, 17.3 per cent.; it occurred after the seizures only in 12 cases, or 23.0 per cent.; it occurred only immediately before or after the fits in 3 cases, or 5.7 per cent.

Biting the Tongue. Although a large number of genuine cases of epilepsy occur in which this symptom is never met with, it is important as a corroborative symptom. In the first series it was met with only in 32.7 per cent.; in the present, 28 patients, or 53.8 per cent.; exhibited this feature. It did not appear that the female sex, as might have been anticipated, were less prone to inflicting this injury upon themselves than males; because of the 24 cases in which the tongue had not been bitten, 16 were males and 8 females.

Urine. The author has found no constant derangement in the urine associated with epilepsy. He has always failed to discover any sugar, nor has he met with a constant or even frequent excess of phosphates, or a diminution of urea. In several cases he found the urine presenting a specific gravity ranging about 1030, and containing a large excess of urea. There was in the present series no case of albuminuria, except, perhaps, in one instance, in which a small quantity of albumen appeared to be present for a brief period. An excess of phosphates was observed twice, oxalates in one or two cases, and an excessive deposit of lithates in a small number of cases.

Treatment. The author, while urging the value of treatment in alleviating the disease and indefinitely postponing the seizures in a larger number of cases, admitted the doubt which always attached to any absolute cure of epilepsy. He advocated no specific, but the employment of all rational means indicated by the constitution and peculiar symptoms of each individual case. Above all, he considered perseverance in a combination of moral, regiminal, and medical treatment essential. As many of the cases analysed had not been under the author's care permanently, he did not regard the result as to treatment indicative of what might have been effected in the whole series. He considered that he could lay claim to 8 cures, that 15 were decidedly benefited, while the remainder were either uninfluenced by treatment or did not continue under observation for a sufficient period to justify any positive statement as to the result.

Correspondence.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—Again I must crave your indulgence for space to inform the Poor-Law medical officers that a Select Committee of the House of Commons has been appointed to inquire into the "Operation of the Laws relating to the Poor, etc." (See *Times*, Feb. 23, p. 8.) I, therefore, trust all who can give evidence on the present iniquitous system of the medical relief of the poor, will not fail to tender their evidence, and do their utmost to improve the laws, which now inflict much cruelty on the poor, and are so grindingly oppressive to the medical profession. I have addressed a letter to the Chairman of the Select Committee on Poor-law Administration, House of Commons, requesting to know when I may attend to give evidence. If my professional brethren will do likewise, I have little doubt they will receive all necessary information; but no time should be lost.

On the first of this month, Mr. Serjeant Pigott wrote to me in respect of our proposed Bill, as follows: "Mr. Villiers' Committee is just the opening you require; and the evidence of all the matters related in your Preamble would be received by that Committee. After their report, the field for legislation will be well prepared." I regret I cannot guarantee the expenses of those gentlemen who may come to town; as some of my friends have of late grown rather penurious, and the funds will not permit it; but I believe the Select Committee will pay *a something*.

I have this day received a letter from Dr. Bisset Hawkins, kindly enclosing a cheque for £5 "towards defraying the expenses of the proposed application to Parliament"; and I have also received within the last two months about seventy subscriptions from Poor-law medical officers. I wish I could say seven hundred instead of seventy; for then I should be in a position to print a large mass of evidence and send it to each member of the House of Commons, and thus have ensured a thorough knowledge of our grievances. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, February 26th, 1861.

[We need hardly say, that the profession is deeply indebted to Mr. Griffin for his strenuous efforts in so just a cause. Although he may not have succeeded in obtaining the justice he seeks, it is certain that he has attracted the serious attention of the legislature to the case of Medical Poor-law relief, and has thus promoted and hastened on the reform desired. Ed.]

COLLEGES OF PHYSICIANS.

Sir,—Will you permit me to suggest an addition to your just animadversions on Dr. Alexander Wood's recent after-dinner lucubrations at the Edinburgh College of Physicians?

You have omitted to state that the regulations of the London College of Physicians regarding the new order of licentiates, exact a curriculum of *four* years from candidates, instead of *three*, as required by the College of Surgeons and by the Apothecaries; and that the theoretical and practical character of the examinations is in every way calculated to elevate the profession, rather than to depress it. Did our College intend to tread in the footsteps of the Edinburgh Corporation, it would not have adopted measures which must, for a time at least, deter the bulk of general practitioners from approaching its portals. It would not have prohibited the open shop, and the making up of prescriptions for other men's patients, had its only object been to fill its pockets by virtue of its *prestige*.

Whatever the former faults of our ancient Corporation, the present generation of London Fellows have read the signs of the times rightly, and are doing their best to raise Medicine to the social dignity it merits, by reducing its trading associations to the minimum permitted by the present usages of the land.

Allow me to take the opportunity of congratulating you upon the vigorous development recently manifested by the British Medical Journal. I am, etc.,

A Fellow of the London College of Physicians.

February 22, 1861.

Medical News.

APPOINTMENTS.

Royal Army. The following appointments have been made:—

Greer, Staff-Surgeon A. J., to be Surgeon 21st Foot, *vice* Mackinnon.
Holton, Staff-Surgeon F., M.B., to be Surg. 77th Foot, *vice* Jones.
Jones, Surgeon H. H., M.D., 77th Foot, to be Staff-Surg., *vice* Greer.
Mackinnon, Surgeon D. R., M.D., 21st Foot, to be Staff-Surgeon, *vice* Holton.
Martin, Staff-Assistant-Surgeon C., to be Staff-Surgeon, *vice* Abbott.

Royal Navy. The following appointments have been made:—

King, Alfred, Esq., Assistant-Surgeon, to the *Isis*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Brett, A. T., M.D., to be Surgeon 1st Battalion Hertfordshire R.V.
Garrington, W. H., Esq., to be Surgeon 1st Administrative Brigade Hampshire A.V.
Hailey, H., Esq., to be Honorary Surgeon 6th Bucks R.V.
Hiron, T. W., Esq., to be Surg. Warwickshire Yeomanry Cavalry.
Hoar, Wm., Esq., to be Assistant-Surgeon 3rd Battalion, 1st Corps, Kent R.V.
Roots, W. S., Esq., to be Surgeon 12th Surrey R.V.

To be Honorary Assistant-Surgeons:—

Arnison, G., Esq., 20th Durham R.V.
Culling, R., Esq., 25th Somerset R.V.
Fenton, H., Esq., 1st Shropshire R.V.
Hemmino, C., M.D., 4th Berkshire R.V.
Iles, F. H. W., Esq., 2nd Hertfordshire R.V.
Lawrence, J., M.D., 12th Company Ayrshire R.V.
M'Leod, D., Esq., 5th Roxburghshire R.V.
Searle, R. B., Esq., 10th Cornwall A.V.
Scott, T. A. F., Esq., 9th Company Dumfriesshire R.V.

DEATHS.

Aran, F., M.D., at Paris, aged 44, on February 22.
Lauder. On February 17, at 8, Sloane Street, Harriet, widow of the late W. Preston Lauder, M.D., F.R.S.E.
Smith. On February 21, at 27, Westbourne Terrace, Laura, wife of Clement Smith, M.D., Her Majesty's Bengal Army.
Stringer. On February 22, at Kennington, Catherine, wife of James Stringer, Esq., Surgeon.
Ward. On February 21, at 23, Finsbury Circus, aged 38, Georgiana E., wife of Stephen H. Ward, M.D.

University of Oxford. On February 21st, the degree of Bachelor in Medicine was conferred on Reginald Southey, Christ Church.

Army Estimates. The army Hospital corps numbers 1,002 of all ranks. On this staff there are 473 medical officers. The pay for the medical staff amounts to £105,031.

New Commissioner in Lunacy. The Lord Chancellor has appointed John Forster, Esq., Barrister-at-Law, late Secretary to the Commission, to be a Commissioner in Lunacy, on the resignation of Bryan Waller Procter, Esq.

Hunter's Manuscripts. We learn that Professor Owen has brought to a completion his task of editing the hitherto unpublished manuscripts of John Hunter. The work will, we understand, afford additional evidence of the industry and genius of the great surgeon and physiologist.

Nitrification. Millon has observed that *nitre* is always produced with regularity provided a humus product, an ammoniacal salt, and a mixture of earthy carbonates, are present, the solid mass being constantly moistened and exposed to the air. The action of the alkaline humate is to absorb oxygen, and this oxidation is transferred to the ammonia, which hereby becomes converted into nitric acid. (*Chemist and Druggist.*)

Medical Society of London. The president of this society, Dr. Garrod, gave a *conversazione* at his residence on Wednesday evening last. It was attended by above two hundred Fellows of the society and visitors. The annual general meeting of the society, for the election of officers for the ensuing year, will be held next Monday evening; and the eighty-eighth anniversary meeting will take place on Friday, the 8th instant, at the Thatched House Tavern.

Humboldt's Library. The admirers of Humboldt will soon have an opportunity of acquiring souvenirs of that philosopher. Mr. Henry Stephens, who purchased the Baron's library, purposes selling it by auction; and as the library is of a miscellaneous character, comprising rare, stately, and costly folios and quartos, as well as unimportant octavos, it will be within the means of the majority of book collectors to purchase, if so inclined, a memorial of the great physicist's library.

Rodent Ulcer. This is not at all affected by internal medicines. The great object is to remove the whole of the diseased parts, and to procure a soft and supple cicatrix. There must be no tension on the cicatrix, as this will certainly cause a relapse. You may use deep escharotics, such as the chloride of zinc. In some parts, however, as the eyelids, escharotics are inadmissible: here free excision should be used, followed by transplantation of healthy skin from the neighbouring part. (*Mr. Hutchinson.*)

Ozone. Messrs. Andrews and Tait have communicated to the Royal Society the results of their experiments on the volumetric changes which occur in the formation of *ozone.* They find that when ozone is formed from pure oxygen, by the action of the electrical discharge, there is a considerable condensation; so that, if the allotropic view of the constitution of ozone be correct, the density of that body, as compared with oxygen, would be represented by a number corresponding to the density of a *solid* or *liquid*, rather than that of a *gaseous* substance. (*Chemist and Druggist.*)

Donations to Medical Charities. The following Medical Charities have received a share of the balance of the sum (remaining in the hands of the Lord Mayor) which was subscribed for the distressed working classes during the past winter: viz., the City Dispensary, £15; the Metropolitan Dispensary, £15; the City of London Dispensary, Finsbury, £15; the Farringdon Dispensary, £15; the London Philanthropic Society, £25; the Truss Society, £20; the London Hospital £50; the Poplar Hospital, £50; the Free Hospital, Gray's-inn-road, £30; the Free Hospital, Devonshire-square, £30; the Brompton Hospital for Consumption, £30; the Hospital for Diseases of the Chest, Victoria park, £30; the Ophthalmic Hospital, City, £20; the Ophthalmic Hospital, Gray's-inn-road, £20; the Seamen's Hospital, £30; the Sea Bathing Infirmary, £30.

Health of London, Week ending February 25th. Zymotic diseases in the aggregate were fatal last week in 283 cases, whilst the corrected average of corresponding weeks is 272. Seven very young children died from small-pox; 20 children from measles; 36 from scarlatina; and there were also 11 deaths from diphtheria. Whooping-cough carried off 78 children. Ten deaths, 7 of which were of children, were caused by syphilitic disease; and there were 2 from intemperance, besides 2 from delirium tremens. The most fatal disease in the list is from bronchitis, which was fatal in 188 cases; the next is phthisis, fatal in 149. The mortality of the former differs little from the average; that of the latter is below it. Eleven deaths were caused by suffocation, 7 of which occurred in bed, and 3 were by the impaction of food or other substance in the throat. Two children were burnt by their clothes taking fire; two by other means; five children were fatally scalded, among whom was a boy scalded by drinking hot water from a teapot. The deaths of two centenarians, a widow aged 100 years, and a man 102 years, were recorded in the week.

Opinion of Counsel on the case of the Dublin College of Physicians, referred to them by the General Medical Council. 1. Supposing the College to have no larger powers than are disclosed in the case laid before the Attorney-General of Ireland, we are clearly of opinion that it has no power to confer the degree of Doctor Medicine; and without the degree there can be no right to title, to whatever extent it may have been conceded by courtesy. 2. We are of opinion that the title in question is not one of the qualifications mentioned in Schedule (A) of the Medical Act, which only mentions Fellows and Licentiates of the Irish College of Physicians. 3 and 4. We think that the Registrar of the General Council is not bound to copy into the General Register entries in the Local Register which on their face are erroneous, nor to enter as qualifications particulars which are not within the terms of the Act, and are contrary to the orders and regulations of the Council. The remedy should, in our opinions, be found in a correction of the Local Register. We think it the duty of the Local Registrar to keep his Register in conformity with the lawful directions of the General Council, or of the Excecutive Committee, to whom they have delegated their powers; and if he fails in this duty probably a *mandamus* could be obtained to compel him to perform it. It is, however, most likely that as the General Council have the power of publishing the Medical Register in the proper form, it will be found that this is practically the only matter of importance; and the Irish Branch Council will think it useless to continue the controversy. (Signed) H. M. Cairns.

Lincoln's Inn, Jan. 31st, 1861. Arthur Hobhouse.

Newspaper Report of Medical Societies. The New York Academy of Medicine has commenced a new presidential term, by placing, in the most unqualified manner, its seal of disapprobation upon the newspaper reports of its proceedings. At a late meeting, the following resolutions were passed with but one dissenting voice:—"Whereas, Section 3 of Article 1 of the Code of Ethics American Medical Association, adopted by this Academy, declares it to be "derogatory to the dignity of the profession" to publish cases and operations in the daily prints, or to suffer such publications to be made, and that such proceedings "are the ordinary practice of empirics and highly reprehensible in a regular physician," therefore,—Resolved, That the practice heretofore in vogue in this Academy of permitting reporters of secular papers to attend its meetings, take notes of its proceedings, and publish them, is in violation of said code, and is hereby prohibited in future.—Resolved, That it is equally in violation of the said code for Fellows of the Academy to publish, or cause to be published, any transactions thereof, in any other than strictly medical journals.—Resolved, That nothing in the aforesaid resolutions shall be so construed as to preclude the Academy, at its discretion, from publishing in the newspapers any of its discussions or of its acts relating to hygiene or to public health.

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.

Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.

Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.

Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.

Friday....... Westminster Ophthalmic, 1·30 p.m.

Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 7 p.m.: Election of Officers and Council; 8.30 p.m.: Dr. Kidd, "On Chloroform."—Epidemiological, 8 p.m.: Dr. B. W. Richardson, "Further Inquiries on Scarlet Fever."—Entomological.—Odontological, 8 p.m.

Tuesday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Pathological.—Photographical.

Wednesday. Royal College of Physicians, 4 p.m.: Dr. Guy on Tabular Analysis applied to the Discovery of Truth in Medicine and the Allied Sciences.—Obstetrical, 8 p.m.: Dr. Madge on a Case of Uterine Hæmatocele; Mr. Baker Brown on the Treatment of Fibrous Tumours of the Uterus; Dr. Tanner on a New Form of Vaginal Pessary.—Society of Arts, 8 p.m.—Geological.—Pharmaceutical, 8.30 p.m.—Ethnological.

Thursday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Harveian, 8 p.m.—Royal, 8.30 p.m.—Antiquarian.—Linnæan, 8 p.m.—Chemical, 8 p.m.

Friday. Royal College of Physicians, 4 p.m.: Dr. Barker on Diseases of the Serous Membranes.—Medical, 5 p.m. (Anniversary Meeting).—Western Medical and Surgical, 8 p.m.—Astronomical, 8 p.m.—Royal Institution.

Saturday. Royal College of Surgeons, 4 p.m.: Professor Savory on Food.—Asiatic.—Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—February 23rd, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week....................	Boys ..1035 Girls.. 856	1891	1328
Average of corresponding weeks 1851-60		1781	1414

Barometer:
Highest (Sun.) 29.578; lowest (Th.) 29.271; mean 29.461.

Thermometer:
Highest in sun—extremes (Mon.) 97 degrees; (Sat.) 50 degrees.
In shade—highest (Sun.) 56 degrees; lowest (Wed.) 35.7 degrees.
Mean—45.9 degrees; difference from mean of 43 yrs.+7.4 degs.
Range—during week, 20.3 degrees; mean daily, 12.1 degrees.

Mean humidity of air (*saturation*=100) 93.

Mean direction of wind, S.W.—Rain in inches, 0.55.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

Mr. W. Martin.—The subject to which our correspondent alludes has been already under consideration; and we hope that we shall soon be able to supply what he desires.

Dr. Mitchell.—We have much pleasure in inserting the following note:—

"Liverpool, 21 Bedford Street South.—Sir,—My attention has been called to a notice of an advertisement which appeared in a Manchester paper. I beg to say that I had nothing to do with its insertion, was much annoyed when I heard of it, and used prompt means to prevent its reappearance.
I am, etc., Thos. R. Mitchell, M.D., F.R.C.S.I.

Dr. S. H.—The original impression of our correspondent is the right one. The quotation runs:—"Vixere fortes ante Agamemnona multi." (*Horace*).

The Epigram on Dr. Lettsom.—Sir: Dr. Wollaston, in his interesting letter of last week, has fallen slightly into error regarding the epigram which he quotes. It was not written by Dr. Lettsom, but upon him, and ran thus:—

"Whatever patients come to I,
I physics, bleeds, and sweats 'em;
If after that they choose to die,
What's that to me?—I. Lettsom."

To the credit of his good nature, the doctor, who was something of a humourist, not only forgave but enjoyed the joke.
I am, etc., Robert H. Bowness, M.D.
Poulton-le-Fylde, Feb. 26th, 1861.

Mr. S. Felce.—The late Mr. Smith of Southam is the gentleman to whom our correspondent refers. We forward an account of a model self-supporting dispensary—the Northampton Dispensary—in which all the particulars required will probably be found.

R. S. W.—Our correspondent will see, on reference to the Journal, that we have not expressed any doubt as to the powers of a Board of Guardians to attend to the directions given, for the relief of a sick pauper, by a medical practitioner, although not their own doctor. What we stated was, that the Board is not bound to do so. Our correspondent sends us a document which shows that Boards of Guardians have the power given them of attending to the directions of any medical practitioner in attendance on a sick pauper.

COMMUNICATIONS have been received from:—Dr. L. Beale; Dr. T. H. Barker; Dr. Roberts; Mr. W. Jessop; Dr. Sieveking; Mr. Toynbee; Mr. Legge; Dr. Kelly; Mr. Savery; Dr. Cowan; Mr. A. Prichard; Dr. Kidd; Dr. Hare; Mr. Daniell; Dr. Hoskins; Dr. Murchison; Mr. Jas. Gardner; Dr. Haughton; Mr. W. W. Jones: Mr. A. Meadows; Mr. S. Wood; Dr. Bowness; Dr. McWilliam; Mr. P. C. Price; Dr. Cormack; Mr. R. Dunn; Dr. Mitchell; Dr. Sandwith; Dr. Wollaston; Dr. Alderson: Mr. Pemberton; and Mr. De Morgan.

BOOKS RECEIVED.

1. A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S. Eighth edition, revised and corrected. London: Churchill. 1861.
2. On Diseases Peculiar to Women, including Displacements of the Uterus. By Hugh L. Hodge, M.D. With Original Illustrations. Philadelphia: Blanchard and Lea. London: Trübner and Co. 1860.
3. Dairy Stock: its Selection, Diseases, and Produce. With a Description of the Brittany Breed. By John Gamgee. Edinburgh: Thomas Jack. 1861.
4. The Foot and its Covering: with Dr. Camper's Work on the Best Form of Shoe. By James Dowie. London.
5. The Roman or Turkish Bath: its Hygienic and Curative Properties. By William Potter. Manchester: T. Dinham and Co. London: Simpkin, Marshall, and Co.
6. Hints on Insanity. By John Millar, L.R.C.P.Edin. London: Henry Renshaw. 1861.
7. On Insufficiency of the Aortic Valves, etc. By John Cockle, M.D. London: 1861.
8. The Practice of Hiring Wet-Nurses, etc. By M. A. Baines. 1861.
9. The Comparative Properties of Human and Animal Milks, etc. By M. A. Baines. 1861.
10. On the Waxy or Amyloid Degeneration of the Kidneys. By T. Grainger Stewart, M.D. Edinburgh: 1861.
11. Thoughts on Satanic Influence. By C. Cowan, M.D.
12. Thoughts on Prophecy. By C. Cowan, M.D.
13. Letter on Lunacy Law. By P. R. Nesbitt, M.D.

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The SEVENTY-THIRD ANNIVERSARY DINNER of this Society, will be held at the Albion Tavern, Aldersgate Street, on THURSDAY, the 4th of APRIL, 1861.

THOMAS ARTHUR STONE. Esq., President in the Chair.

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C. J. B. Aldis, M.D.
B. G. Babington, M.D., F.R.S.
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Thos. A. Stone, Esq. (President)
Martin Ware, Esq., V.P.

Dinner to be on the Table at half-past Six o'clock. Tickets, One Guinea each, to be obtained of the Stewards, of the Secretary, and at the Tavern.

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S. W. J. MERRIMAN, M.D., Secretary.

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Clinical Lecture
ON SCIATICA.

DELIVERED AT

ST. MARY'S HOSPITAL, JANUARY 26TH, 1861.

BY

THOMAS K. CHAMBERS, M.D.,

CENSOR OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON;
PHYSICIAN TO ST. MARY'S HOSPITAL; ETC.

Three of my patients now under your eyes in the wards are indexed as cases of "sciatica." The term is not a scientific one; for it no more describes the essential nature of the disease than the words "headache" or "stomach-ache." Like them it denotes the anatomical locality of the symptom, and is applied to painful affections of the great sciatic nerve, whatever their nature or cause may be.

It will impress upon your minds several points in the pathology and treatment, if I recall to you a few points in the anatomical relations of the part affected. It is the largest nerve in the body; therefore, even slight interference with it may be expected to be severely felt. It is formed by an union of the sacral nerves; which, inside the pelvis (forming the sacral plexus), are covered on the left side by the rectum, and on the right side are in close proximity to the cæcum; hence, it is very liable to be influenced by the condition of either of these portions of the intestinal canal separately. It is covered by a strong fibrous sheath; and may be expected to experience morbid states which attack such membranes. It supplies motion as well as sensation to the limb; and, therefore, loss of power may follow its derangement. Inside the pelvis, branches are sent from the sacral plexus to the bladder and other pelvic viscera; you will, therefore, not be surprised to find occasional paralysis of the bladder. After it passes beyond the border of the pyriformis muscle, it lies nearer the surface than any other great nerve; it goes straight from one of the warmest berths in the body to one of the coldest, so it is easily affected by changes of temperature.

The first case which I shall mention is a good instance of the last-named fact. The affection is strictly local and pretty recent, and is clearly traceable to a local change of temperature acting on this part of the body alone.

Case I. Henry T., aged 28, a night patrol, of temperate and regular habits, was admitted January 14th. He was quite well six weeks ago, when he got wet in the saddle several days running, and had his buttocks and thighs much chilled. This was followed by cold and shivering, but no particular pains in the limbs. Suddenly, while grooming his horse, he was seized with pain in the hip, which made him lame, but did not quite lay him up. He continued, with the aid of a stick, to walk his beat. One day, and one day only, before Christmas, the pain quite went away; but, with that exception, it became worse and worse. Since Dec. 29th, he had been laid up, unable to stand, so bad was the pain; and he had had croton oil rubbed in externally, mustard poultices, and blisters, without the least relief. On admission, the tongue, pulse, and action of the bowels, were reported natural, the urine clear. The situation of the pain, as indicated by one finger, was the exit of the sciatic nerve, and pressure on that spot much increased it. He described, also, a pain as situated deep in the pelvis, indicating it as at the back of the groin.

There is clearly here a purely local disease, requiring local remedies. The morbid anatomy of it I cannot describe from any observation of my own; none of us, probably, ever have seen or will see the necropsy of a person who dies during sciatica; it is not itself fatal, nor does it accompany fatal diseases. But Professor Rokitansky describes the sheath of the nerve as filled with a yellow gelatinous fluid, and as having its blood-vessels injected. This is just what you find in the rheumatic inflammations of other fibrous parts, and what a general knowledge of pathology would teach us to expect; and, therefore, I fully believe it is the unseen state in this and similar cases. It is a local disease, requiring, therefore, local remedies. You will say, it has been so treated, and it has not got well. True; but, however, the remedies were for all that of the right sort; perhaps not quite powerful enough, and moreover, not quite local enough. What does that pain deep-seated in the pelvis mean? It indicates that the sacral plexus is affected, as well as the trunk of the nerve; that the remedies must be applied to that part to have their full effect. Such, I take it, is its meaning. Now, applications to the skin of the hip and thigh are a long way off the sacral plexus, and you would not get much nearer by placing them on the groin. You can, however, get quite close to, indeed, quite on, the seat of action, by remembering how the plexus is overlaid by the rectum. His former treatment, mustard poultices, blisters, and croton oil, would rather puzzle that part certainly; but you can use an allied remedy, turpentine; and you can introduce it to the pelvis either by enema or by the mouth. The former method is, perhaps, the most direct; but I have preferred the latter in this case, for the mutual convenience of nurse and patient. His card records the following treatment:—

Jan. 14th. ℞ Olei terebinthinæ, olei ricini, mist. acaciæ, āā ℥ss; mist. camphoræ ℥j.

Jan. 16th. Repetatur. 19th. Rep. 21st. Rep. 24th. Rep.

So that, in all, four doses of turpentine have been taken. On the 16th the pain in the hip was much relieved, but he had a little strangury during the action of the turpentine. On the 19th, he said he felt better after each dose, though the pain returned. The strangury was much less than at the first dose. On the 23rd, the pain was not felt during the day, "a third as bad as it was." He could cross one leg over another in sitting, and could walk without pain. But you will have observed he still walked lame, and spoke of a kind of numbness running down the thigh. This is a slight paralysis very usual in sciatica, arising, probably, from the pressure of the swollen sheath upon the nerve. He said the deep-seated pain in the pelvis was gone. You will find this treatment most effectual in removing the local condition of the part affected in sciatica.

To-day (the 26th) he walks quite easily. But, unfortunately, the turpentine, not having sufficient employment in doing good, has taken to doing mischief, and has brought on strangury again. He has had two grains of opium as a suppository, which has relieved it to a certain extent; and, instead of continuing the turpentine, I have ordered him to be cupped to four ounces on the hip.

Case ii. Francis B., aged 53, has no occupation now, but formerly did a business of £1000 a year, and had a famous constitution. Wealth and health were lost through self-indulgence in eating and drinking. He had gout thrice in one foot, and once in both feet, twenty years ago. Poverty made him temperate; but again, two years ago, he had some money left him, and drank it out, being only stopped by a severe attack of epistaxis. Since then he has not exceeded, but still had a twinge of gout six months ago. After this, he was quite well till six weeks ago, at which period, after having felt for three days pains flying about him, he was attacked, while quietly sitting before the fire, with a stabbing pain in the back and left hip, so bad that he was obliged to go to bed. It has been continuous ever since, and he has generally kept in bed; as, though he can hobble along without actual pain, he is in constant fear of it. All through this illness there has been a difficulty in voiding his urine, and the bowels have been costive. He has been under medical treatment all the time, and has taken bark and quinine in large quantities, and has had blisters on, without being at all relieved. On admission, the tongue and pulse were natural. On examination of the hip, the pain was found to be situated midway between the great trochanter and tuberosity of the ischium; and in this part there was great tenderness on pressure, and fear of its being touched. There was pain also running along the outside of the fibula, but not in any intermediate place.

In this case you have seen a different cause for sciatica; namely, gout. But, whatever the cause, the local condition of the nerve is probably much the same, and is better for local treatment in all cases, indeed, is rarely cured without it. The remedies given have been pretty active; he was admitted on the 11th, and between that date and the 26th he has had five half-ounce doses of turpentine, and has been cupped twice to six ounces. For four nights he was allowed to have fifteen grains of Dover's powder every night, because I thought the turpentine would purge it off safely next morning. It did not make him sleep, or appreciably relieve the pain, so it was left off; for I do not like opiates in sciatica, as a rule. He had less pain on the night after it was left off.

On the 18th he said he had experienced great relief after the second cupping. Take a hint from this—your second cupping will often confer much more marked benefit than the first. "He felt pain in the lower part of the leg, but not in the hip unless it were touched." You will observe that where there is pain in the periphery of a nerve arising from disease in its trunk, the peripheral pain will often last longer than that which is at the real seat of injury. Take care to retain this fact, as it will often prevent your throwing away uselessly on the branches those remedies which should be applied to the trunk.

On admission, the patient accused the bladder of some want of power. I have seen this before in sciatica; and I believe it arises from the vesical branch of the sacral plexus being affected, and therefore shows that the morbid condition has penetrated into the interior of the pelvis. If it really arise from that cause, and not from any old stricture, you need not be afraid of causing strangury by turpentine. You will have seen in this case the drug doing no harm; and, on the contrary, relieving the symptom which arose from a torpid condition of the bladder.

On the 23rd, he bore pressure on the sciatic nerve, and walked and moved the limb without fear, but with a certain loss of power. He had remarked several times, that though the pain was relieved after each cupping and dose of turpentine, yet it returned before the next. The cause of the disease, the gouty crasis, remains, and must be treated, or he will have his sciatica back again. He is therefore ordered—

℞ Vini colchici ♏xx; potassii iodidi gr. iv; mist. camphoræ ℥j. M. fiat haustus ter die sumendus.

Case iii. Sarah B., aged 19, an anæmic maid of all work and sempstress, with her face and shoulders covered with black-heads (*acne*), was admitted January 11th. She has had occasional pain in her hip three years. It came on first when she was out of place, and had been frequently wet in her feet. She has had pains flying about in her limbs often, but has never been laid up with any distinct attack of rheumatism in her hands or feet. She has been always pale, and liable to cough. Her bowels are costive, and her appetite bad. She is very subject to pain in the epigastrium at night and after food. She became lame from sciatica a few days before Christmas, and took to her bed during the last few days of the year, because the pain got so much worse. She has been an out-patient at the hospital, but does not appear to have attended; so that Dr. Sieveking, under whose care she nominally was, sent for her to come in. On admission, her tongue was clean; the pulse 92, and weak; the urine pale. The catamenia were stated to be always regular, except for three months when she was first ill, three years ago. She has occasional leucorrhœa. The seat of the pain was clearly indicated by the finger to be the sciatic nerve, and not the hip-joint. The heart and lungs seemed quite normal.

Here is a cause for sciatica the very opposite of the last; that was from eating and drinking too much—this, from eating and drinking too little. Indeed, in a further page of the report, she says that "the pain sometimes entirely goes away, especially after a good dinner; but always comes back again, especially at night." But though deficient diet has been the cause of her illness, yet good diet alone would not restore health. In point of fact, however much she swallows, she cannot really eat, that is digest, enough. This is shown by the want of appetite and peculiar dyspepsia; which she describes as causing weight at the epigastrium, and inability to lie on the left side. The local disease required treatment first; she was cupped once to four ounces; was purged with turpentine; and had four grains of iodide of potassium three times a day. Five days after admission, it is reported that "the pain in the thigh is less than it was, and she is improved in every way."

On the 23rd, she expressed herself as still better, and was walking about the ward. She was put on quinine and iodide of potassium.

The last-named drug I intend to act locally, when I give it in sciatica. I intend it to promote absorption of the yellow gelatinous fluid which is effused in the sheath of the nerve, and which keeps up lameness by pressing upon it, just as you numb your finger by pressing the ulnar nerve. I do not suppose there is any syphilitic taint in this case to be benefited by the iodide. Nor, though I give her quinine, do I think that the disease is of malarious origin. Yet syphilis and malaria do sometimes produce sciatica. The syphilitic form is of the same nature as periosteal nodes, and is undistinguishable in local effects from rheumatic, gouty, or anæmic sciatica. The malarious form is purely neuralgic, and I do not think it can ever be accompanied by effusion. It is distinguishable by its complete intermittence, and, as far as my experience goes, is rare. The patients usually have some other development of the ague-poison, which will help you to a diagnosis.

Sometimes there is a dull kind of pain running down the course of the sciatic nerve in persons with sluggish costive bowels, which, unlike the forms I have been describing, is not worse at night, but in the day has no paroxysms of agony, and is not so much aggravated by local pressure. This kind of sciatica depends, not on the state of the nerve or its sheath, but on an unhealthy sluggish condition of the lower bowels. When on the right side, it is due, usually, to accumulation of fæces in the cæcum; when on the left, to piles in the rectum, and the consequently congested state of the blood-vessels. It is not made worse by exercise; indeed, I think it gets well sooner when the patient is obliged to move about. And for this reason you do not see examples of it in the wards, for it is better treated in the out-patient department; whereas, in the cases with which I have been illustrating the subject, absolute rest is essential.

I do not like in clinical lectures to speak of the treatment of forms of disease not at the time under your notice, and, therefore, I will not say more about malarious, syphilitic, and costive sciatica. But I think it will be useful, in reference to the three cases you have been watching, to notice a few remedies which might have been given without glaring malpraxis, but yet which I did not think *the* best under the circumstances. In the first place, sedatives might have been considered desirable; and you will find in books a long list, commencing with opium, of those which have been administered in sciatica. The very length of the list shows that people have been disappointed with the action of one after another; and my own experience is that the benefit from their use is temporary, fallacious, and obstructive to the final cure. The only one thoroughly unobjectionable is the external application of chloroform. Blisters and acupuncture are remedies of similar intention to those which I have prescribed; not quite so powerful, but equally rational and proper. Plasters are of no use during the acute stage, but when the patient is getting about again, they are an useful defence against the cold. Let them be spread upon stout soft leather; for it is the leather, not the emplastrum, that does good, and any kind that will stick tight answers equally well. Of electricity and baths I have no favourable experience to tell. I have never seen them of use to the local disease after those which I have mentioned have failed; though I dare say they may relieve some mild cases, like numerous other expedients, with which I will not detain you.

Hydatids of the Liver. Mr. Boinet presented before the Academy of Medicine, at Paris, a young man cured of a hydatid cyst of the liver by puncture, after Recamier's method, followed by injections of iodine, and which had previously been treated in vain by frequent capillary punctures.

Illustrations
of
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

LIVERPOOL NORTHERN HOSPITAL.

CASES OF ACUTE DISEASE OF THE CHEST.

Under the care of A. T. H. Waters, M.R.C.P.

[Reported by F. P. Phelps, Esq., junior House-Surgeon.]

(*Continued from p. 558 of volume for 1860*)

Case viii. *Extensive Effusion into the Left Pleural Cavity of several Months standing: Recovery.* Antonio Flora, aged 23, a man of colour, sailor, was admitted into the Hospital on June 18th, 1860. In February last he was laid up in hospital at Mobile with severe pain in the side and fever, which lasted for about three weeks. He remained in hospital for two months, and then sailed for this country, where he arrived about a fortnight before the date of admission mentioned above. During the first part of his voyage, he was able partially to do his work, but subsequently he was compelled to give it up. When admitted, he complained of pain and dyspnœa in the left side on inspiration. On examination, the left side of the chest was found universally dull both in front and behind, except in the supra-clavicular region. The dulness did not pass the median line in front. There was scarcely any perceptible movement of the left side during respiration; the side was full, but there was no particular prominence of the intercostal spaces. Over the left lung no respiratory murmur could be heard, except at the upper and anterior part, where it was faint; vocal fremitus was also absent, and ægophony could be distinctly heard both laterally and behind. The pulse was 84, and small. He was ordered two grains of iodide of potassium, with tincture of squills and juniper water, four times a day, and a croton oil liniment for the chest; ordinary diet and porter. On the 30th, the symptoms were about the same. Tincture of iodine was ordered to be painted over the outside of the chest daily. On July 3rd, the respiratory murmur could be faintly heard at the apex of the lung behind. On the 11th, the following was substituted for the tincture of iodine:—iodine ℈iss; iodide of potassium ʒij; water ℥iij. He improved rapidly from the time this was freely applied to the chest. On the 14th, the respiratory murmur could be distinctly heard at the upper part of the chest both in front and behind. On the 17th, it was faintly heard at the lower part of the lungs and in the axilla, whilst the resonance was returning at the upper part. His health was excellent.

Further details are unnecessary; the patient improved daily. The external use of iodine was continued, and he took iodide of potassium internally in bitter infusion. The following are the notes on August 1st:—Respiratory murmur heard all over the left lung; resonance natural, except at the extreme base, where there is slight dulness, and where the breath-sounds are somewhat faint.

He was discharged on August 3rd.

Case ix. *Pleuro-Pneumonia of the Left Side, with Effusion: Recovery.* Michael Lappin, aged 35, a corn-porter, of intemperate habits, was admitted into the Hospital on July 17th, 1860. Ten days before admission, he had slept in the open air on the grass; and when he awoke, he felt great pain on the left side; and this was followed by rigors and cough, which troubled him more or less up to the time of admission. He had slept badly, and had expectorated a good deal of white frothy matter; and on one occasion the sputum was red. No treatment had been adopted. When admitted, he complained of dyspnœa, and pain in and inability to lie on the left side; there was deficient movement of that side; dulness on percussion behind, reaching nearly up to the level of the spine of the scapula; with absence of respiratory murmur and vocal fremitus over the same space, and distinct ægophony towards the base of the lung. On the right side, the breathing was loud, and percussion-sound normal. The pulse was 100, small, and compressible; respirations 32; tongue foul. He confessed to have been a "hard drinker"; he was moderately stout, but had a somewhat unhealthy aspect. He was ordered gr. iij of calomel and half a grain of opium at bedtime; one-eighth of a grain of tartar emetic in liquor ammonia acetatis mixture every four hours; four ounces of brandy daily; and beef-tea.

On the 20th, the pulse was 80, the pain diminished, and the tongue cleaner; the dulness was about the same. The brandy was reduced to three ounces, and a large blister was ordered to the left side.

On the 21st, the pulse was 76, and the breathing much relieved by the blister, which had discharged freely.

On the 23rd, the saline was omitted, and five grains of iodide of potassium in bitter infusion were ordered three times a day. On the 26th, the blister was repeated, and the brandy reduced to two ounces. The dulness was diminishing. On August 1st, the respiratory murmur could be heard all over the left lung, distinctly at the upper part, faintly at the base. He was ordered chop diet and porter, and the brandy was omitted. On August 6th, he was much improved. Slight dulness remained behind, and crepitation was heard at the base of the lung.

He left the Hospital on the 9th, slight dulness alone existing at the extreme base of the lung.

[*To be continued.*]

WHITWORTH HOSPITAL, DUBLIN.

DISEASE OF AORTIC VALVES PROVING FATAL; ENORMOUS ASCITES ARISING FROM AN UNUSUAL CAUSE.

Under the care of D. J. Corrigan, M.D.

[*From a Correspondent.*]

Thomas Hewson, aged 37, labourer in the Docks, entered the Whitworth Hospital on November 22nd, 1860, under the care of Dr. Corrigan. At the time of admission he was almost moribund; face livid and slightly jaundiced; breathing greatly oppressed; cough incessant with viscid expectoration. The whole body was anasarcous; the abdomen enormously distended with fluid, very tense, but free from tenderness on pressure. On examining the thorax, abnormal dulness was discovered in the precordial region; increased extent and amount of the heart's impulse, also a double *bruit de soufflet*, most audible at the base; slight dulness over the lower portion of the lungs and crepitating *râles*; the pulse was rapid, and of the rolling character often observed in patency of the aortic valves. The diagnosis was made of aortic patency; hypertrophy of the heart; congestion and œdema of the lungs. The anasarca was easily accounted for by the cardiac disease; but the amount of ascites was wholly disproportioned to this cause, and itself offered an obstacle to the examination of the abdominal viscera. He gave the following history of his illness.

Three years ago, while at work, he was attacked with shivering; distress of breathing; cough and dropsical swelling of the feet and legs. He was brought to the hospital, and after some weeks recovered sufficiently to be able to resume work. A year later he had a severe illness, which from his account would appear to have been peritonitis; he recovered from this also, and again returned to work. Within a year he observed the abdomen enlarge gradually, and, being in London at the time, he sought advice at Guy's Hospital. He was tapped there on two occasions, and temporarily relieved. During the last six months he had again suffered from dyspnœa and ascites, both of which had lately undergone considerable aggravation. His life, according to his own confession, had been, since the age of 18 years, one of hardship, exertion, and continued intemperance.

A few days after admission to the Whitworth Hospital, despite all treatment, he sank. His greatest suffering before death arose from thirst; the sputa before death were bloody.

The autopsy verified the diagnosis made during life of the condition of the thoracic viscera; and moreover revealed the remarkable and very unusual pathology of the disproportionate ascites.

The heart was enormously hypertrophied, weighing twenty-six ounces. The mitral valves were slightly thickened; the aortic were greatly puckered, and quite inadequate to act in closing the aortic orifice; one of them was perforated, the orifice being ragged and warty. The aorta was diseased, especially in the portion nearest the heart, for the extent of an inch or so. In this situation some calcareous deposits could be felt. The lungs were congested; sections from the lower portions sank in water; and numerous apoplectic clots throughout them explained the immediate cause of death. On laying open the abdominal cavity and permitting the enclosed fluid to drain off, a most remarkable condition of the parts contained came into view. The whole mass of abdominal viscera were bound together and to the walls of the cavity by extraordinarily developed false membranes. These passed in all directions, varying for the most part from one-sixteenth to one-eighth of an inch in thickness, and in some regions in the form of bands equal in dimension to the columnæ carneæ of the left ventricle. The most remarkable of these bound the stomach to the under surface of the diaphragm. The agglutinated mass of abdominal viscera was with great trouble removed from the body, and at its upper portion, with some difficulty the liver was recognised; it presented a perfectly globular form, and was reduced to less than one-third of its normal dimensions. On making a section, the organ was found perfectly healthy as to structure, but compressed by a dense false membrane in which it was enclosed, to such a degree as to impede almost completely the transit of blood through it.

The history of the case, already detailed, corresponded accurately with the *post mortem* appearances. The first attack was probably aortitis; and, although recovered from, laid the foundation of the cardiac disease which ultimately proved fatal. The second illness was peritonitis, and the contraction of lymph effused on the surface of the liver, gradually advancing, was the cause of the ascites; the hepatic circulation being obstructed by *pressure from without* in no less degree than we are accustomed to find it in cirrhosis, by contraction of the capsule of Glisson or *pressure from within.*

Recognition of Professional Services. Dr. Topham having sent in his resignation as senior physician to the South Staffordshire General Hospital, Wolverhampton, the directors have honoured him with the appointment of consulting physician, and have likewise started a subscription, which is being liberally responded to, for a piece of plate, as a recognition of his valuable services for a period of seventeen years; the original arrangements of the hospital having been principally made at his suggestions, and carried out under his supervision. The managers of the Orphan Asylum have likewise showed their approval of his great professional attention to the interests of that charity, by adding his name to the list of Vice-presidents.

Original Communications.

REMARKS ON WORMS IN THE PERITONEAL CAVITY: WITH A CASE.

By Humphry Sandwith, M.D., Physician to the Hull General Infirmary.

The common occurrence of worms in the intestines, without any corresponding serious mischief, might, in the absence of other admonitory facts, inspire too confident an opinion of their harmlessness. The *habitat* of the ascaris lumbricoides is in the small intestines, where, though often harmless, it is sometimes a mischievous intruder. It would be a waste of words to enumerate all the secondary disturbances in remote organs resulting from its irritating presence in the bowels. I exclude also those rare occurrences noticed by Andral and others, of worms finding their way into the excretory ducts of the liver, and even through the œsophagus into the larynx, with consequent pneumonia, bronchitis, or suffocation. But the point to which I specially invite attention, and which is suggested by the case under review, is,—how far their presence in the intestine endangers ulceration of its structure. Admitting the comparative rarity of the occurrence, it is well, nevertheless, to put on record every well-authenticated case countenancing the probability of so grave a result.

A reference to the subjoined details of the autopsy of a case of this kind, at which I was present, will shew that there was a well-defined circular opening in the duodenum, through which six worms had escaped into the peritoneal cavity. The idea of perforation, we are told by a high living medical authority, is now-a-days discarded. But "*vixere fortes ante Agamemnona multi.*" Even Morgagni himself long ago arrived at the same conclusion. His scepticism as to the power of the round worm to perforate the living intestine appears in his inquiry, "whether, as they (the lumbrici) irritate the intestines in the living body, it is likewise to be supposed in all the histories, which are produced to prove it, that they perforated the intestines before death, or rather that they perforated the intestines after death; and if they did really pervade the intestines before death, whether it was where an abscess or some kind of ulcer had opened them a passage from the intestines." This sagacious remark he sustained by a reference to cases and authorities, in which the intestine was perforated like a sieve, but "these appearances were seen in the *dead* body," where of course decomposition had facilitated the perforation. He then shrewdly asks,—How is it, "when they are seen in the *living* body?" In answer to this question, he quotes a case observed by Hippocrates—that of a little child of Dinius, from whose navel a large worm sometimes came out. This Morgagni explains at once by adding;—"but as a 'fistula' had been left there from a foregoing wound, and the worm and vicious sordes came through the same place, it was certain, beyond a doubt, that the small intestine was perforated, *but it was from a wound.* For that it was perforated by the worm, was not even suspected by the grave interpreter Vallesius." He then quotes from the same authority an example of fifteen worms coming out from the right hypochondrium and the loins on the same side, *yet through tumours which had been formed in both places and suppurated.* Many facts similar to these are on record. Thus in the *London Medical Journal* for 1786, Mr. Coleman gives a case of several worms successively discharged through a sloughing wound in the loin, occasioned by an old hernia; and Dr. Robert Hamilton relates another of worms finding their way through the navel of a child, whose funis had been injured at its birth by rude violence; inflammation of the subjacent parts following, and suppuration ultimately opening a passage from the bowels.

But what Morgagni's sagacity led him to doubt, not to say deny, the possibility of, is not only discarded by modern belief, but actually disproved by the microscope, which has finally disposed of this question, as well as dissipated the day-dream of "spontaneous generation."

Having described the anatomy of its head and lips, Küchenmeister emphatically remarks,—"But the worm can never actively bore through the healthy intestine. For this it is rendered unfit by the structure of its head and its thin lips, *which are certainly adapted for suction, but not for boring.*" It thus appears, that perforation of the living intestine by the ascaris lumbricoides is impossible; and that, when this worm finds its way through, there must have been ramollissement or ulceration during life, or decomposition of the tissues after death. The really practical question then arises,—are the worms capable of exciting so much local disease, as to produce ulceration of the coats of the bowel? The affirmative supposition is alike countenanced, I think, by the case before us, and by general reasoning. If they can create so much irritation as they are known to do in remote organs, their presence in the primary seat of irritation may well suffice to originate and maintain local inflammation and its consequences. "Worms," says Dr. John Mackintosh, "occasionally produce violent colicky affections, with vomiting and purging, sometimes of blood, and, I believe, ulceration of the bowels; and even peritonitis may be excited by this irritation." To the same effect, and still more to our purpose, Küchenmeister asserts, that "the cause of such perforations lies only in morbid ulcerating processes of the mucous membrane of the intestine, which are certainly mostly of a dyscratic nature (tubercular, cancroid, typhoid). They can only be caused by the worms, when these, being present in great numbers, have led to ileus, inflammation of the intestine, and adhesion of the intestine with partial mortification." In the case under review, although we could obtain but little knowledge of its previous history, yet the locality of the ulcer, with the absence of delirium, excludes the supposition of the typhoid dyscrasy, as did the appearance of the ulcer and the surrounding parts that of the cancroid; and the general aspect of the patient, and the freedom of his lungs and other organs from tubercular deposits discountenanced that of the scrofulous. The man's bony structure was admirable, his chest well-developed, his muscles unwasted, and his general condition inclined to the adipose. There was every indication, in short, that he was cut off by an acute disease of short duration. It seems probable, that the system had been but little affected by these noxious parasites, until they had succeeded in setting up a local inflammation in the duodenum, which by its results destroyed life.

The case now noticed bears a close resemblance, in everything but its cause, to the case of chronic circumscribed irritation, ending in a perforating ulcer of the stomach, so accurately described by Dr. Abercrombie. The able remarks of Dr. Stokes, in the *Cyclopædia of Practical Medicine*, furnish us also with numerous analogies, which favour the idea of worms being competent to set up a destructive inflammation. To his catalogue of causes producing a perforating ulcer in the intestines,—namely, gastro-enteric fever, catarrhal fever, acute enteritis, phthisis, hypercatharsis, and suddenly suppressed diarrhœa,—we may fairly, therefore, add *the irritation of worms.*

For the following lucid history of the case which has given rise to the above remarks, I am indebted to the kindness of Mr. Evans, the house-surgeon of the Hull General Infirmary.

Peritonitis; Worms found in the Peritoneal Cavity; Perforation of the Intestine; Death; Autopsy. Antonio Krabolo, aged 23, an Austrian sailor, was admitted under

Dr. Sandwith, on December 12th, 1860. His countenance was pale and haggard, and indicative of distress. He complained only of pain in the abdomen. No particulars of his history could be obtained, merely that he had been ill about six days only. He was at once put to bed; and on being seen a short time afterwards, was found in a very depressed state. The warmth of the body was greatly reduced; pulse very small and feeble. Abdomen decidedly tumid, but not particularly painful on pressure, except over the region of the bladder, where there was some dulness on percussion. The catheter was introduced, but only a few ounces of urine were withdrawn. A turpentine fomentation was ordered to be applied to the abdomen:—

℞ Ammon. sesquicarb ℈ij; spiritûs æther. nitr. ʒiij; mistura camph. ad ℥viij. M. Fiat mistura, cujus sumat partem 8vam 3tis horis.

℞ Calomel. gr. j; opii gr. ½. M. Fiat pilula cum singulis dosibus misturæ sumenda.

He was ordered to have three ounces of brandy. There being no evidence of his having had any action of the bowels for several days, a common enema was ordered in the evening.

Dec. 13th. He still remained in a state of collapse. The skin was cold and clammy; the pulse at times scarcely perceptible; state of the abdomen was much the same; there had been no action of the bowels. The enema and purgative were repeated, and a grain of calomel (without opium) was prescribed to be taken every three hours. He was ordered to have wine and brandy *ad libitum.* In the middle of the day he vomited a large worm (*ascaris lumbricoides*).

Vespere. The vomiting continued, but he had thrown up no more worms. Ten grains of calomel in powder were ordered to be taken immediately. He died the same evening at ten p.m.

Autopsy, fourteen hours after death. On opening the abdomen a quantity of dirty brown fluid, not having a marked fæcal odour, escaped. There was evidence of intense and general peritonitis. The intestines, especially the small ones, were coated with a thick layer of lymph; and, on peeling it off, their peritoneal coat was found intensely congested. The omentum adhered by effused lymph to the exposed surface of the intestines, and the liver was coated with a layer of the same. On separating the coils of intestine from each other, three worms, similar to the one vomited before death, were found loose in the upper part of the peritoneal cavity. Three more were afterwards found, deep in the cavity of the pelvis. The alimentary canal was removed entire, from the termination of the œsophagus to near the anus. In the stomach were found three more worms; its mucous membrane was healthy (rather pale), and no perforation visible. A stream of water was passed through the rest of the canal for the purpose of ascertaining the existence of an opening, through which the worms must have escaped into the cavity of the abdomen. About the middle of the duodenum such an opening was found (through which the water issued in a tiny stream), about the size of the middle of the body of a full-sized lumbricus, perfectly round, with smooth edges, the lymph on the peritoneal surface extending quite up to its margin. The mucous membrane of the canal throughout was paler than natural, otherwise perfectly healthy; there was some little vascularity in the neighbourhood of the perforation, but to no marked degree. At this part, but below the opening, were found three more worms (making in all thirteen). The bladder was empty and contracted; the other organs were healthy. The large intestines contained hardish lumps of pale yellowish-colored fæcal matter.

There being no evidence of disease in the intestinal canal, beyond what has been mentioned, the probability is, that the worms caused irritation and local inflammation in the canal, ending in ulceration; some of the worms, as well as the contents of the intestine, escaping through the opening into the peritoneal cavity, and setting up general peritonitis.

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Continued from page* 196.]

iii. In adverting to the pathology of tuberculous glands, it was stated that the period at which softening and suppuration occur is influenced by certain conditions which can generally be traced to constitutional and local causes. It was further observed that, although suppuration is a destructive process, it must, nevertheless, be sometimes considered a favourable result, especially when cicatrisation follows, and the general health improves.

Suppuration having led to the destruction of a gland, it is a point for consideration, not merely whether direct surgical treatment should be adopted, but of what such treatment should consist.

From the earliest periods in the history of this disease, it has always been a question, when a lymphatic gland has become disintegrated by the formation of abscess, whether an artificial exit should be made by the surgeon, so as to afford relief, and save the complete destruction of a portion of the investing integument; or whether natural processes should alone procure the elimination of the foreign material? My own practice is to treat a glandular abscess, simple or tubercular, much in the same way as the generality of surgeons treat purulent collections in cellular and other tissues. I am convinced that a judicious resort to surgical means not only saves much suffering and cuts short a troublesome process, but prevents that amount of deformity and disfigurement which so frequently follow the unassisted destruction of a tuberculous glandular abscess, and the subsequent closure of its walls.

During the progress of suppuration, local applications should be applied with extreme discretion. When inflammation renders the affected glands more than ordinarily painful, fomentations and poultices may be of use; but they are productive of more harm than good when the destructive changes are free from such complications. In the treatment of glandular abscess, it is all important to prevent the surrounding areolar tissue from becoming too extensively involved; and, for this reason, it has been recommended to continue the local application of iodine, as (to use the words of a practical writer on scrofula) "it tends to circumscribe suppuration, and prevent the implication of the cellular tissue surrounding the glands, which, if left to itself, generally becomes involved to a considerable extent." The advisability of affording surgical assistance in the generality of cases of glandular abscess being admitted, the following methods may be briefly considered.

a. Caustics. The most distinguished of all modern authorities on scrofulous diseases who recommends the treatment of suppurative tuberculous glands by means of caustic, is M. Baudelocque. This surgeon advises that glandular abscesses should be opened by means of a caustic composed of equal parts of quicklime and caustic potash made into a paste with spirits of wine, and that all the implicated tissues should be destroyed, so that subsequent healing may be satisfactorily accomplished. (*Op. cit.*)

To the general use of caustics for the purpose of opening suppurating glands, I have a decided objection; for I cannot believe that the surgeon is acting wisely in allowing the integument covering organs undergoing such destruction to become so extensively involved. Cases, however, occur where the aid of the surgeon will only be solicited at a period when wholesale destruction has advanced; and then the practice of M. Baudelocque will occasionally be of value. A somewhat modified method of cauterisation, consisting in the limited destruction of that portion of the skin which appears more particularly to sympathise with the deeper mischief, is sometimes attended with beneficial results. I have often employed the potassa fusa to destroy the thinned and diseased integument covering a suppurating gland, in instances where a resort to other means has been declined, or deemed improper. As a rule, however, I believe that, unless the skin be extensively involved, caustic applications are of no decided benefit; but, on the contrary, disappointment frequently follows their inappropriate use.

b. The Knife. A much more precise, less painful, and satisfactory method of evacuating the purulent contents of tubercular glands, is that by means of the knife. On this point, I think, the majority of surgeons, who have paid attention to the treatment of glandular affections, agree. But to enable the practice to be effective, not only as concerns the mere evacuation of the tubercular matter, but the attainment of subsequent healing, and the least possible disfigurement, it is all important that attention should be paid to the following considerations:—Firstly. At what period is it most advisable to give exit to the tubercular matter? Secondly. What should be the nature and extent of the incision, and what subsequent treatment should be adopted to procure healing?

Although, as before stated, the majority of modern surgeons lean to the use of the knife in the treatment of glandular abscess, still an unanimity of opinion does not exist concerning the period at which it should be called into requisition. Some authorities are in favour of early incisions, and some postpone a recourse to the lancet till ulceration and other destructive processes have seriously undermined, not only the structures immediately implicated, but those which should not have been allowed to become more than sympathetically included. When there appears no probability of the absorption of the fluid which has resulted from suppuration of the greater portion of the affected gland, my own practice is to give an exit to it so soon as it can be clearly appreciated, and before the covering integuments have had time to become seriously involved.

But it is not always easy to decide on the exact period at which the knife should be used. Although fluctuation may be detected, it by no means follows that the entire gland is involved in suppuration. Very commonly the suppurative process is limited to the circumference of the organ; and it then becomes a matter of moment whether the surgeon should not somewhat indefinitely postpone interfering, in the hope that the confined fluid will be removed by absorption. Unnecessary delay is, however, often fraught with mischief, and I believe that a hesitating and uncertain policy, as to the expediency of giving exit to the pent-up matter, is productive of more harm than is generally admitted.

Although, as a rule, no definite plan can be enforced for the surgical treatment of such cases, still it is more than probable that a timely incision, so soon as matter has formed is the most judicious practice that can be adopted. If this recommendation be followed, I am confident that not merely will the tendency exhibited by the portion of the gland less seriously affected to undergo further destruction be oftentimes lessened, but it will be placed in a much more satisfactory state for regaining its normal conditions and functions. The advantages of this practice may be seen from the details of the following case.

A lad, aged 10, was lately a patient under my care at the Great Northern Hospital, on account of a tubercular gland situated at the lower part of the right side of the neck. At the time of his application, only the superficial portion of the gland was involved in purulent destruction. Fluctuation being detected, an opening was made in the most depending part which allowed the escape of the fluid. In the course of three days, the wound, which was limited, healed, while a gradual but marked diminution in size of the remaining portion of the gland had taken place.

Where only a single gland is affected, comparatively little difficulty will be experienced; but, unfortunately, it more often happens that a series of glands, either simultaneously or in succession, evince a proneness to pass more or less rapidly into suppuration. Cases of this description call for the closest attention of the surgeon, who will have to watch narrowly that the skin does not become extensively implicated, by reason of the close continuity of the various diseased glands.

The rapidity with which suppuration may take place in instances of glandular tuberculosis has already been noticed, and the sad results which so often follow a neglect of local treatment are too plainly evidenced by the occurrence of tortuous sinuses with hard, unhealthy, and secreting edges, and, if these should ultimately heal, by the disfiguring cicatrices which remain till the skill of the surgeon is called into requisition.

I may quote the following case, as indicating the advantages to be obtained from recourse to early and timely incisions into suppurating glands.

A young gentleman had suffered, when five years of age, from tubercular disease of a small cluster of lymphatic glands, situated near the middle and front of the neck. Softening and suppuration ensued, surgical assistance was too long delayed, and the result is that the part is now disfigured by unsightly scars. When he had arrived at the age of eleven years, he experienced another attack of tubercular inflammation of the lymphatic glands, situated somewhat higher in the neck on the same side. Directly suppuration could be detected, I made a linear incision into the gland, and evacuated the matter. The lips of the wound were carefully adjusted, after sponging out its interior; and complete union ensued. No perceptible cicatrix resulted.

One of the very worst cases which I have seen of neglected tuberculous glands, was admitted into the Children's Infirmary, at Margate, about two years since. The patient was a little girl, about 6 years of age. Not only did the face and neck present one mass of indurated, angry, and discharging ulcers at such parts at which lymphatic glands had been allowed to suppurate and ulcerate, but at the armpits, groins, and bends of the elbows, the same piteous condition existed. This is by no means a solitary instance of the lamentable results which I have known to accrue from a want of judicious care and skill in the surgical treatment of suppurating tubercular lymphatic glands. Although strongly advising a resort to the knife for the purpose of evacuating the contents of a tubercular gland so soon as suppuration has converted the gland-substance into an abscess, and before any considerable amount of thinning has injured the integument covering the diseased organ, yet I still more urgently recommend the division of the implicated structures, no matter how much involved, in preference to admitting further ulceration and more serious destruction. The surgeon must, however, not be disappointed if, even after a moderately early incision, the edges of the wound assume a strictly tuberculous condition. I have frequently experienced such a result; but have generally considered that, had ulceration been allowed to proceed, the amount of subsequent unhealthy action would have been of a still more formidable character.

Much depends on the fancy of the operator as to the nature and extent of the incision. Some surgeons recommend a very limited one; while others, on the contrary, speak favourably of the advantage of freely carrying the knife through the covering integument. Instead of cutting the tissues, it has been suggested that the purulent matter should be evacuated by means of a puncture with a trochar, care been taken that the wound thus made is closed as rapidly as possible. The advantages of this plan were forcibly insisted on by Henning. (*Op. cit.*)

Lebert recommends, when exit is to be afforded to the matter resulting from suppuration of a tuberculous gland, that a free opening should be made. (*Op. cit.*)

Dr. Ranking advises that the abscess should be punctured with a broad-shouldered lancet, and that, if necessary, a free incision should be subsequently practised. (*Op. cit.*, p. 259).

Dr. Tyler Smith recommends that "a puncture" should be made into a gland when it has suppurated. (*Op. cit.*, p. 103.)

My own experience is in favour of a limited linear incision when the abscess is small, and there is every prospect of the contained fluid being easily evacuated. When, however, the abscess is extensive, and there is reason to suspect that mingled with the purulent secretion will be found shreds of lymph, only partly disintegrated portions of the gland structure, and cretaceous particles, it will be expedient to resort to a freer incision; but, as it is difficult to foretel the exact condition of the contents of the abscess, I would suggest that the use of the knife be, on all occasions, as conservative as possible, as it is always easy to enlarge the outlet should circumstances point to the necessity of so doing.

But little stress has been laid, even by the best esteemed authorities on scrofula, on the importance of judicious and skilful surgical interference with suppurating glands. Mr. Lloyd, who is precise on some points connected with glandular abscess, only cursorily mentions the puncturing of such, and states that he believes "it is of very little consequence whether a puncture be made or not." (*Op. cit.*, p. 66.)

Although it may be immaterial to some surgeons whether they puncture or incise a glandular abscess, and whether the incisions they practise be limited or free; yet to the patient it is of the very highest importance that the end to be attained be accomplished with as little subsequent disfigurement as possible. I cannot too particularly insist on the importance of attending to this requirement, as it is one which oftentimes not only materially affects the personal comfort of the sufferer, but tends to enhance the reputation of the surgeon and the credit of his art.

It is often a point of extreme nicety to decide at what particular part of a glandular abscess the incision should be made. This is a question which cannot be satisfactorily answered, and will need a different interpretation on almost every occasion. As a rule, it is advisable not to wound the skin at such points where the infliction of an injury would be followed with destructive consequences, and subsequent disfigurement. I have frequently tapped glandular abscesses through healthy parts, by what is termed the subcutaneous method, and have every reason to be well satisfied with the result, as, among other advantages, it allows the distressed integument, and the tissues which surround the diseased gland, to regain their normal conditions, when not too extensively implicated.

After an incision into a glandular abscess has been practised, it becomes a question as to what shall be the future treatment. It should always be the aim of the surgeon to procure resolution and healing with as little delay as possible; but, owing to the constitutional peculiarities which commonly modify all local tuberculous manifestations, and the varying and uncertain nature and extent of the local mischief, it is next to impossible to sketch any definite practice. Sometimes it will be expedient at once to close the lips of the incision, after having thoroughly evacuated the contents of the abscess, so that union and obliteration of the cavity may ensue. This will be much aided by recourse to pressure, etc. When the abscess is large, and the integument not seriously implicated, it has been recommended, after clearing out all foreign matter, to inject the cavity with iodine solutions. (Ranking, etc.) This plan sometimes succeeds, but it is more often followed by increased purulent secretion, and then the healing which ensues is by granulation.

Lebert recommends that stagnation of the purulent matter should be prevented by the introduction of a wick (*une mèche*) into the cavity, whereby the walls may be stimulated to increased and more healthy action. (*Op. cit.*, p. 172.)

My own practice, when I have failed to procure immediate union of the lips of the wound, and a cessation of further secretion, is to endeavour to close the sides of the abscess as speedily as possible by granulation, etc.; for, if this be not accomplished, unhealthy and obstinate ulcerations with fistulæ will, in all probability, result, and cause not only distress and disfigurement to the patient, but annoyance and trouble to the surgeon.

The further consideration of the subject may be advantageously postponed till the local measures for the healing of tuberculous ulcerations are discussed. I cannot, however, refrain from again urging the importance of constitutional treatment when the system is evidently at fault; for, when such is the case, not only will the employment of mere topical means oftentimes prove unavailing, but positively injurious.

[*To be continued.*]

CASE OF EXTRAVASATION OF URINE: RECOVERY WITHOUT INCISIONS.

By William Legge, Esq., Surgeon, Wiveliscombe.

A. B. aged 45, a butcher, of highly nervous temperament and irregular habits, first consulted me in October, 1859, for stricture of the urethra of long standing.

The history of the case was obscure. He had evidently suffered from urinary abscess; and there was a fistulous opening in the perinæum from which urine occasionally dribbled; this had existed some three months before I was called to see him for retention of urine. With some considerable difficulty, and at the expense of some time and patience from the irritable sensitiveness of the subject, I passed a No. 1 silver catheter, and relieved the bladder. There were two evident obstructions of the canal; one about three-fourths of an inch from the meatus, the other just anterior to the membranous portion of the urethra, giving the sensation of cartilaginous induration. The instrument was so tightly grasped, that to push it forward after feeling it had passed the strictures was difficult; and even after it had been left in twenty-four hours, there was great resistance to its withdrawal.

For more than two months I persevered in daily passing instruments, and only by that time reaching No. 4, I was anxious to use Mr. Holt's dilator, which I have seen so successfully employed by him at Westminster Hospital; but my patient, (who was the most refractory I ever encountered and who dreaded everything like an operation) refused further treatment, persisting that he was sufficiently relieved, and, despite my warnings, persisting also in drinking.

Two months after this date (March 10th, 1860) I was again summoned to see him. He had been the day before attending a fair, and retained his urine for many hours; but, whilst straining and endeavouring to relieve the bladder, he felt sudden ease, though no urine escaped. He now complained of a burning sensation about the perinæum and external organs; the scrotum and penis were exceedingly œdematous; and on each side, above and below the line of Poupart's ligament, a dark erysipelatous looking blush overspread the skin. I had no doubt that extravasation had taken place; and, stating the urgency of the case, I suggested calling in another surgeon in consultation; but so alarmed was the patient, that, although I threatened to give up the case, he refused both another opinion and immediate incision, choosing to die rather than "be cut about." In this dilemma, and finding it impossible to pass a catheter, I enlarged the fistulous opening with a probe, ordered poppy fomentations, gave an opiate, and directed perfect quiet with nothing to drink.

Next day, the œdema had increased; the skin was of a deep purple; the urine had constantly dribbled from the fistulous opening. Small doses of Dover's powder were ordered every four hours, and fomentations were continued. On the 12th, appearances were the same; there was no pain nor feverishness, nor any sign of irritation. On the 14th, the purple hue of the skin had become very much paler. He was allowed linseed-tea to drink, as he had tasted no liquid since the night of the 10th. The iodide of potassium ointment, of double strength, was ordered to be rubbed into the affected parts. From this time the swelling gradually subsided, and the blush faded from the skin; the urine passed through the opening and also by the urethra. On March 19th he returned to his occupation; the only trace of the attack being a brawny thickened scrotum.

Seven months afterwards (on October 19th), he sent for me. He was in excruciating pain, tossing about, and almost delirious. The penis and scrotum were œdematous; but urine passed freely, and no other symptoms of extravasation were present. I administered an opiate, and expressed my determination to have a consultation. The friends suggested a medical man of this town, and I readily concurred; he, however, refused to meet me, and as it was very late, it was arranged to send to the next town early in the morning if the patient were no better. My surprise, therefore, may be imagined when, on going to the house next day, I found that Dr. ——, though refusing to meet me, had offered to undertake the case, and that the friends, against the wish of the patient, had consented. I need not say Dr. —— is not an associate. I regretted thus losing sight of so interesting a case. I can only add that the man was soon again at his daily avocations.

Several questions suggest themselves in relation to this case. Is it an anomalous one? or may we assume that, where extravasation has been gradual and arrested early, the effused urine has not so destructive an effect on the tissues as has been generally attributed to it? How is it that no sloughing or destruction of tissue resulted? In the second attack, when the penis and scrotum alone seemed involved, may it not have been the case that the urine was prevented from following the usual course between the superficial and deep fasciæ, by the deposition of plastic matter consequent on the irritation set up by the first attack?

I am not aware of any similar recorded case; and, imperfect as the above history necessarily is, I have thought it might prove interesting to my professional brethren, if not for its singularity, as illustrating that *vis medicatrix naturæ* which so often comes to our aid in daily practice.

THE STRUCTURE AND GROWTH OF TISSUES:

A SHORT ACCOUNT OF THE CONCLUSIONS DERIVED FROM SOME NEW OBSERVATIONS WITH THE HIGHEST MAGNIFYING POWERS.

By LIONEL S. BEALE, M.B., F.R.S.,
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[*Continued from p.* 194.]

III.—Of the Component Particles of Germinal Matter. Composition. Motion. Structure and Arrangement.

Composition. It seems difficult to form an idea of the nature of the complex chemical changes which we know must take place at the moment that an *inanimate* particle of matter becomes *living*, and the moment a *living particle dies;* but, with regard to the chemical changes occurring *during the life* of the particles of germinal matter, nothing whatever is known. During this period, the most powerful chemical affinities are overcome, and decompositions silently and perfectly effected, which cannot be artificially induced. We can, of course, only examine chemically the compounds *resulting from the death of living particles;* and not even these can be formed independently of living organisms.

In living matter, ordinary physical and chemical forces seem to be more or less in abeyance; but the moment life ceases, they again exert their sway, and elements which had existed in different states of combination, or uncombined, rush together, and compounds result, the examination of which affords us but very slight information as to how these component elements were related to each other when they formed living matter.

Motion. I have been led to conclude that constant motion is taking place in each spherule which forms part of every mass of active germinal matter. This motion always takes place in one direction, from centre to circumference. Its rapidity varies much in different cases. I think this movement depends, not upon the existence of a repulsion between the living particles, but upon an active power which each possesses, by virtue of which it tends to move outwards from the centre, where it first became living, and which causes the particle to undergo perpetual division, and the mass of which they are composed to divide. Such tendency to move from a centre, it would seem, must be due to a force very different to that which controls the movements of inanimate matter. While the latter exerts its influence as well on masses of the largest magnitude and of infinite minuteness, through *infinite distance*, the former only exerts its ascendency when the distance is infinitely small and the particles very minute; and it would seem that its influence can only be exerted in a comparatively very circumscribed space which is freely supplied with atmospheric air.

Structure and Arrangement. I have adduced facts which seem to me to justify the following conclusions with reference to the structure of the smallest living particle; but it is very probable that, as investigation advances, these inferences may be modified in important particulars. Its form is spherical, and it consists of smaller spherules varying in size; each spherule being composed of smaller spherules, and these of still smaller ones. The surface of each is composed of a very thin layer of matter possessing different properties from tha within it. Each spherical particle is free to move in fluid, and the intervals between each particle are occupied by a fluid. This fluid contains, in solution—

1. Matter about to become living.
2. Substances which exert a chemical action, but do not necessarily form a constituent part of the living mass, and particles which are rejected, and not capable of being animated.
3. Substances resulting from the changes ensuing in particles which have arrived at the end of their period of existence.

It is certain that the smallest particle of living matter is of complex composition; for it is impossible to conceive the existence of a *living particle* of any simple substance like iron, oxygen, nitrogen, etc. *Living* involves chemical and physical change affecting several elements. It seems to me, then, that the term *living atom* could not with propriety be employed, seeing that *living matter* is of complex composition, while the idea of an *atom* seems to involve simplicity of constitution, and indivisibility. The whole question of the arrangement of the atoms in living matter can at present only be discussed theoretically; and I would now merely remark with reference to this subject, that although all living particles are of complex composition, many different elements may exist in very different proportions in living matter; and that there is reason to believe that the smallest visible particles of *every kind* of living matter are spherical. It is inferred that these particles are themselves composed of spherical particles; but in answer to the questions how and why matter should assume the spherical form, the moment it becomes living, I am unable to say anything. It has always appeared to me certain that, as this investigation advances, it will acquire more and more the same infinite extension which attends every onward step in astronomical science.

[*To be continued.*]

The Musk Deer. At a meeting of the Pharmaceutical Society, Mr. Peake gave the following interesting account of the musk deer:—"In general form and size it closely resembles the common deer, but the hair is thick and strong, and very like small porcupine quills. The habits of the musk deer are a good deal like those of the hare. It is common on the spurs of the Himalayas, at an altitude of from 10,000 to 14,000 feet, and is usually snared by the hunters, but the specimen exhibited was shot. The pursuit of the animal is extremely toilsome, and sometimes hazardous, so that there is no probability of sufficient musk being obtained to cause any great alteration in the price. The musk is found in a thin membranous sac, which lies under the outer skin of the abdomen. The sacs, or pods, usually contain from two drachms to one ounce of musk, according to the age of the animal. At one year old, the pod contains no musk; at two years old, only a yellowish milky substance is found, and it is not until the animal is three years old that sufficient musk is found for extraction. The natives, however, sometimes cut off the young pods and fill them with a mixture of the dried liver and blood of the animal, with some musk, and sell them for full-grown pods. It is difficult to prevent the natives from making additions to the best, and a correspondent of the author mentioned an instance in which musk pods given by a native prince as a valuable present, were nearly worthless from the adulteration which had been practised. The mountains on which the musk deer are found extend from the interior of India towards Thibet and Chinese Tartary, and it was probable that all the varieties of musk known as Russian, Chinese, and Nepaul, come from the same district, and were the product of the same species, the differences in appearance depending upon the age of the animal, and the way in which the pod is dried. The produce of one year received by the correspondent of the author was 120 pods, containing from 110 to 120 ounces of musk.

DR. B. W. RICHARDSON'S

LETTSOMIAN LECTURES

ON

CERTAIN OF THE PHENOMENA OF LIFE.

DELIVERED BEFORE THE MEDICAL SOCIETY
OF LONDON, FEBRUARY 1861.

Dr. Richardson delivered his third and last Lettsomian Lecture on Monday evening, February 25th. The subject was the Process of Resuscitation after apparent Death.

In commencing, the lecturer recalled attention to the statement made by him in the previous lecture, that caloric has the power of restoring muscular action; and, in illustration, he performed the following experiment. Into the aorta of an animal which had been previously killed with chloroform, a tube was inserted; and water at 115° Fahr. was slowly injected into the arterial system. As the current passed along, the muscles commenced to contract, and the limbs were thrown into motion. This condition, he said, would continue until the tissues became infiltrated with fluid. For the success of this experiment, certain details must be attended to. As few vessels as possible must be divided; for otherwise the water will not permeate the extreme parts. The current must be pushed slowly, otherwise the cellular tissue is at once infiltrated. And the temperature of the water must not exceed 115°, as, if it be higher, then paralysis from over-relaxation is induced. The same results are produced in animals killed by carbonic acid or by drowning, but in a less marked degree than in those killed by chloroform.

The effect of heat in restoring muscular action has, Dr. Richardson observed, a deeper meaning than the mere effect of the application of a stimulus to a muscle. For, when a muscle has ceased to respond to galvanism, it may be again rendered obedient to this stimulus by supplying it with caloric; so that the caloric exercises a primary and independent power, without which the electrical action is of no avail. In Dr. Richardson's opinion, the phenomena observed approached more closely than any other to an explanation of the cause of muscular motion. It seems as if heat were the relaxing force; and that contraction were produced by the removal of the heat, or its resolution into another force. If the removal of the caloric be prevented, as by enclosing the animal in a warm medium, the action soon ceases; while, if the animal be laid on a cold surface, so that the heat is rapidly removed, then the action is more decided, and of longer duration.

This view of the nature of muscular action, if tenable, goes far to explain what is called rhythmical action, such as that of the heart. On this point, while the lecturer differed from Dr. Radcliffe on some of his views regarding muscular contraction, he agreed with him that the muscular structure of the heart is relaxed by the entrance of blood into the coronary arteries, and that its contraction is incident to the removal or alteration of the expanding force derived from the blood. Dr. Radcliffe believed that electricity is disposed of from the blood

Dr. Richardson, on the other hand, was of opinion that caloric is transformed, and that the development of an electrical current is the result of this. The explanation of the constant action of the heart lies in the special mechanism by which it feeds itself with blood, which produces temporary relaxation of the walls; this force is expended in producing relaxation, and contraction follows; and the heart sustains its power throughout life by this constant current of blood. If another muscle could be made to supply itself with arterialised blood in the same way as the heart, its action would be thereby rendered rhythmical.

Dr. Richardson now proceeded to consider the phenomena of contraction, as they are manifested in the voluntary muscles. Every muscle, he said, is permeated by caloric, supplied to it by means of the blood; and is thereby held in a passive state, so long as the caloric is supplied without interruption, and at a fixed degree. But, if the thermal equilibrium be disturbed by lowering the temperature—whether by applying cold from without, or by cooling the blood, or by applying the galvanic current—more or less intense contraction is produced. When galvanism is applied, the contraction is continuous if the current be closed; but it alternates with relaxation at each interruption of the current. But, if the muscle be allowed to cool while the galvanic current is continued, the contraction will remain permanent; and if in one limb of a dead animal a current be sustained, the muscles of that limb will remain rigid while those of the other limbs are relaxed.

Thus there are three conditions having the same effects: the abstraction of caloric; the prevention of caloric; and the modification of it by counteraction.

While a muscle is yet warm (in common parlance, vital), feeble contraction can be excited by a prick or pressure. This is the result of disturbance and abstraction of caloric; and it is more marked if the instrument be very cold and be retained in contact. Thus a piece of frozen mercury placed on an exposed muscle will excite general contraction of the limb.

During life, the alternate relaxations and contractions of muscles depend on modifications in the caloric, with which these organs are supplied by the blood, and by which they are kept in a state of relaxation. The nervous system, at the disposition of the will, calls into play a force opposing that of caloric. Several questions arise regarding this; of which the most important is, What is the nature of the counteracting force supplied by the nerve-centres and cords? and what is its source? It is not proved that the nervous force is identical with electricity; but if be not electricity as we understand it, the distinction is one without a difference—for electricity would answer the purposes. The idea of the identity of the nervous force with electricity has led to the formation of several hypotheses as to the brain and spinal cord being batteries, and the nerves the conducting cords; but modern research shows that, in conducting power, the nerve-cords are inferior to other tissues, such as muscle and the coats of the arteries.

Dr. Richardson believed that the nervous system produces its peculiar force at every point where nerve-matter exists, so long as it is supplied with blood. The area of nerve-fibre in the periphery of the body is as great as that of the brain; and its purpose and labour is everywhere the same. Thus the nervous system and the muscular system are each entire independencies. The muscular system, nourished by blood, is charged with caloric; the nervous system, also nourished by blood, is charged with caloric in its electric modification. When the two systems are conjoined, the forces are *in equilibrio*, until a disturbance of the equilibrium in any part takes place, and motion or sensation is produced. The mass of the nerve-force generated is so equally distributed, that interference with any part more or less affects the whole. Thus, when Dr. Brown-Séquard produces epileptic convulsions by irritation of an external nerve, he does not produce the convulsions by any special transmission of nerve-force, but by a disturbance of the general equilibrium, originating in the point to which the irritation has been applied. Thus, also, intermittent galvanism of a portion of the nervous tract produces convulsion, because an alternate disturbance and restoration of the equilibrium is produced. But the action of the continuous current on a portion of the nervous tract virtually cuts this off from the rest of the system, and arrests the action of the will on the muscles; while the excitability of the nerve-trunks below the galvanised part can be called into play so long as they are supplied with blood.

If the nervous system could be disconnected from the muscles, and be supplied with blood, it would exist as a motionless mechanism of intelligence; if the muscular system could be entirely deprived of the nervous system, its connection with the bones and its supply of blood remaining, it would exist as an unintelligent mechanism, requiring an intelligent system to bring it into action and guide it in its course. By the combination of the two systems, with the proper accessory conditions, we have the doubly endowed and self-acting animal.

In vision and hearing, Dr. Richardson observed, it is not that the picture on the retina, or the vibrations affecting the extremities of the auditory nerves, are conveyed to the brain; but the equilibrium is disturbed, and the picture is looked on, or the vibrations are perceived, by the presiding force, at the point where they are produced. Impressions on the skin are also to be regarded as primarily local in their effects; when slight, being pleasant, or not painful; when severe, disturbing the general equilibrium, and perhaps producing even death from the impression on the muscular fibre.

In diseased states, we see these facts brought out. When a man, whose force of life is low, is seized with spasm while bathing in cold water, the spasm is due to direct loss of caloric, and affects first the most exposed masses of muscle. When prussic acid is taken, it arrests calorification; convulsions and death are produced. When a painful impression is made on an exposed nerve-surface in a man whose health is deranged, the equilibrium is disturbed, and involuntary contraction of the muscles takes place.

Dr. Richardson regarded the will as acting by physical agency, through disturbance of the equilibrium of the nerve-force. For, if the will acted otherwise, it ought not to be opposed by mere physical agencies. When, for instance, the poles of an electrical machine are laid hold of, and the attempt is made to open the hand, it is found that the will is resisted, being held for the time in abeyance by a force analogous to its own, but more powerful. If an additional amount of caloric were supplied to the muscles, they would be enabled to overcome the electric force.

Dr. Richardson now proceeded to consider the subject of reanimation after certain forms of death.

During the last eight years, he had performed a number of experiments on the possibility of resuscitation, in cases where the processes of life had been cut short by suspending oxygenation, or, to speak more correctly, calorification. Chloroform had been generally employed as the destroying agent, both on account of convenience and humanity, and because it represents a large group of agents capable of arresting life.

By the term death, in these cases, Dr. Richardson understood the condition in which all appreciable action of respiration and circulation had ceased. He did not say that this absolutely denoted death; but the condition was that which would, under ordinary circumstances, lead to the disposal of the body by burial or other mode.

The methods attempted for restoration included (*a*) Artificial Respiration; (*b*) Electrisation; (*c*) the Injection of various Substances into the Vessels.

a. Artificial Respiration. To test the efficacy of this process, sixty-three direct experiments were performed; but, indirectly, it was also used as an adjunct to other measures. Artificial respiration may be applied in several ways: by merely acting on the chest, as in the "ready method" of Dr. Marshall Hall, or in the arm-movement of Dr. Sylvester; by the instrument of Dr. Brown-Séquard, by which the chest, enclosed as it were in a second thorax, is made to expand by the drawing in of air through the mouth or nostrils on the expansion of the thoracic walls; by Dr. Marcet's pump instrument; or by the double acting bellows of the lecturer.* Of these various methods, Dr. Richardson preferred the bellows; but, in point of fact, it is of no great moment which of the means is employed; "the readiest is the best." If twenty cubic inches of air can be alternately thrown into and removed from the chest of an adult man, the natural act of respiration is imitated; and more is mischievous.

Dr. Richardson had tried artificial respiration in sixty-three cases; on dogs, rabbits, cats, and one pig; and twice on the human subject in accidental death. The animals had been destroyed generally by chloroform; sometimes by carbonic acid, cold, nitrous oxide, ether vapour, hydrocyanic acid, opium, or strangulation. The process of artificial respiration had been modified by using air at various temperatures; air charged with oxygen; pure oxygen; air feebly charged with chlorine; ozonised air; or a mixture of oxygen and hydrogen. The experiments were always commenced within five minutes after the death of the animal, and were carefully conducted.

The vast majority of the experiments were entirely negative in bringing about the restoration of life. After death, the lungs were found of pinkish pale colour or blanched; and in more than half the cases they were emphysematous. The blood on the right side of the heart was generally coagulated; and in three cases it was charged with bubbles of air.

In twenty-six animals, as soon as artificial respiration was set up, the chest-wall was removed. In each instance, the right auricle, and often the right ventricle, was seen pulsating; but this contraction was never sufficient to fill the pulmonic circuit. It was produced, as Dr. Richardson ascertained by special experiment, by the mere exposure of the heart to the air at a temperature of 60°.

In two instances, after death by cold, the action of the heart was materially quickened by throwing into the lungs air at the temperature of 130°; but, though both sides of the heart contracted, the circulation was not started, nor was there any physical indication of tension of the valves. One experiment, however, shewed that, if the action of the heart be not absolutely stopped, life may be restored by artificial respiration, even when the natural respiration has ceased.

A dog having been rendered completely insensible by chloroform, the trachea was opened, and a T-shaped tube was introduced. The animal was allowed to breathe through the tube air charged with ten per cent. of chloroform vapour. The respiration having ceased, and the heart's action having nearly ceased, the air, charged as before with chloroform, was driven in by artificial respiration. The heart now resumed play; but, as often as the bellows were withdrawn, the action speedily ceased. Pure air being now driven in, the heart acted again; and in ten minutes the respiratory muscles began to contract. Chloroform was again given; and, when the respiration had stopped, the heart was giving its last vibration. Air charged with chloroform again started the heart, so that both sounds could be heard; and, when the bellows were withdrawn after twenty minutes, the heart gradually ceased, but continued to act for some minutes, so that the sounds could be distinguished. Dr. Halford, who was present at the experiment, determined that the second sound was first lost; as if the great arteries ceased to contract before the ventricles.

The effects of artificial respiration with oxygen were also negative. Dr. Richardson had, for instance, narcotised a full grown guinea-pig with chloroform, and had thrown into the lungs pure oxygen warmed to 75°, until three thousand cubic inches of the gas had been inhaled. No restoration of the heart's action, nor of natural respiration, followed. The lungs were found to be unusually red; the left side of the heart was contracted, and the right side was full of coagulated blood.

A mixture of oxygen and hydrogen, in equal parts, also produced negative results. In an experiment made to determine the fact, Dr. Richardson found that an animal on the point of insensibility from chloroform would recover on single inhalation of this mixture of gases, though not more quickly than in common air.

In 1854, Dr. Richardson noticed that when about ten cubic inches of chlorine vapour were introduced into a chamber of a capacity of 3000 cubic inches, in which was an animal breathing chloroform, and at its last extremity, a remarkable effect was produced. The animal would almost immediately spring up, and appear to regain consciousness and muscular power. Sometimes however, death occurred in an hour or two from the irritation of the trachea and larynx, which parts became loaded with mucus. In consequence of this observation, Dr. Richardson tried the effect of a mixture of three cubic inches of chlorine in 1000 of air on six animals narcotised by chloroform; no more effect, however, was produced than by common air. After death, the lungs were always found pale.

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* Dr. Richardson stated, *en passant*, that he had been informed that a similar instrument to his bellows had been used by John Hunter.

In the experiment, the air was ozonised, the presence of ozone in a high degree being determined by Moffat's test-papers. No effect was produced when the heart had ceased beating; but, in animals on the point of death, recovery was expedited by the ozone, which thus acted like chlorine, but less powerfully. Dr. Richardson suggested that the inhalation of ozonised air may be of service in cases of poisoning by fixed narcotics, such as opium.

These experiments all showed that life cannot be restored by artificial respiration, when the action of the heart has ceased; but that, if the heart's action have not stopped, and air be supplied to the lungs by artificial respiration, the natural respiratory movement will follow as soon as the muscles of the chest receive a new charge of renovated blood. The respiratory act, then, is secondary to circulation; and artificial respiration, when it acts at all, simply acts, in the first place, on the heart.

The non-return of the action of the heart, when it has once stopped, is dependent on physical no less than on chemical grounds. The right side of the organ first becomes embarrassed; and the left side closes on itself in permanent systole. The embarrassment of the right side is gradually increased by the flow of blood into it from the veins, so that the opposition to its propelling power increasing, the ventricle is unequal to the task of driving a current of blood through the lungs. Observing this, Dr. Richardson had endeavoured to supplement the force of the right ventricle, by means of syringes inserted into a vein or into the ventricles. Mechanical accidents interfered with the results; but in one instance, the pulmonic circuit was re-established by means of a syringe fixed into the right ventricle; and, red blood being sent to the left side, contraction of the heart was to a certain extent induced.

Sometimes, in artificial respiration, a delusive appearance is produced. The cheeks become red; and there may be even a slight quiver. This is apart from the insufflation; it is probably produced by the oxidation, through the skin, of some of the blood remaining in the capillaries. It is observed even in cases in which artificial respiration has not been employed.

The emphysema which so often attends artificial respiration is not, as a general rule, to be accounted for by over-distension; for it may be produced when the air is introduced in the gentlest manner. It is due to the loss of the balance which exists in health between the air and the blood in the lungs. When the balance is deficient on the side of the air-passages, the result is pulmonary congestion or œdema, or even hæmorrhage; when it is deficient on the side of the blood-vessels, emphysema is produced. Obstruction of the pulmonary artery in an animal which is being subjected to artificial respiration, gives rise to emphysema. In like manner, this condition is induced in many cases by the deposition of fibrinous clots in the heart, even though the respiration be weaker than in the healthy state.

b. Electricity. After referring to the interest excited in 1803, when Aldini produced, by galvanism, action in the muscles of an executed malefactor, Dr. Richardson stated that he had performed similar experiments on animals; the only difference being the use of the convenient modern electro-magnetic machine, in place of the cumbrous battery of forty plates.

When one pole is placed in the medulla, and the other at some distant point (the lower part of the spinal column is best), general muscular contraction is produced, which is quite permanent when the current is unbroken, but convulsive when the current is interrupted. Reanimation, however, is not perfect, because the heart remains uninfluenced, or not sufficiently influenced to enter on a powerful rhythmical action.

The object, then, of galvanism should be to make the heart contract; and, if this be effected, a few gentle artificial respirations will complete the rest. In applying electricity to excite the action of the heart, two points have to be considered: the force of the current, and its directions.

In moderate force, electricity excites muscular action; when excessive, it makes muscular contraction permanent. Dr. Richardson had chloroformed an animal some time previously to the lecture, and had passed through the posterior muscles of one hind leg several charges from a powerful induction-coil; the limb remained contracted, but was gradually recovering, as the circulation was regained. On the other hand, if the same experiment be performed on an animal recently killed, the contraction does not relax, but gradually passes into cadaveric rigidity.

In like manner is the heart affected by galvanism, as Dr. Richardson had determined by forty experiments. The action of the pulsating heart can be stopped by the galvanic force even more readily than it can be excited by the same agent. The irritability of the heart may be worn out by gentle galvanism more quickly than by the natural contraction of the organ. Hence, galvanism is a delicate remedy to be applied to the heart, because this organ depends on itself for blood, and in its last contractions uses up the animating force on which it lives; while an ordinary muscle generally dies relaxed and full of blood, on which it can for a time subsist.

Attention to the course of the current is important; for, if the heart can be made to offer one good contraction on the right side while artificial respiration is kept up, there is a chance of recovery. Dr. Richardson had made a number of experiments bearing on this point, some of the leading facts of which were related.

When one pole, insulated by gutta percha, except at the point, was passed into the external jugular vein, and the other applied to the intercostal muscles, rapid contraction of these and of the cervical muscles was induced; but the heart was not affected. Nor was any effect produced on the organ by inserting one pole into the carotid artery, and applying the other over the exposed pectoral muscle, although every muscle of the body became rigidly contracted. When one pole was introduced into the heart through the lower vena cava, and the other was laid over the exposed heart, on a piece of moistened sponge, the heart at once commenced to act; the limbs moved actively; and animation seemed established for some minutes. When the wires of a battery, insulated except at the points, were passed into the heart through the thoracic walls, no effect on the organ was produced. When the current was passed between the vagus nerve and the heart, contraction was irregularly excited at various points; the contraction apparently occurring for the longest time where the caloric is longest retained, especially in the right auricle. This part is the last to die, because the heat which it for a time receives from the blood poured into it by the veins is easily diffused through the thin auricular wall. When the current was passed between the sympathetic nerve and the heart, partial and transient contractions followed in the same way as when the stimulus was applied through the pneumogastric; and the same was observed in the transmission of currents from the brain or spinal cord to the heart.

In but one experiment, then, did galvanism succeed in restoring the action of the heart; and that was, when the positive pole (insulated except at the point), was passed down the jugular vein into the heart, and the negative pole was placed over the apex of the organ; artificial respiration being at the same time supplied. This single experiment, however, shows that the galvanic stimulus may restore the heart to full action; and, the details being learned by careful experiment, the fact may ultimately perchance receive its practical application.

c. Injection of the Vessels. After a brief reference to the operation of transfusion of blood, Dr. Richardson said that the agents capable of affecting muscular action when injected, may be divided into two classes; viz., first, those which, being simple, and warmed to the blood temperature, or charged with oxygen and used at ordinary temperatures, have the property of evolving caloric and of placing the muscles in a condition to contract for a time under the influence of the nerve-force, and afterwards on the application of electricity; and, secondly, those fluids which, so long as the muscles retain caloric, produce when injected the same effects as electricity, ammonia being the grand representative of this class.

The injection of warm water into the arteries produces contraction of the muscles; but the effect is temporary, lasting so long as there is any nerve-force, and then ceasing in general relaxation. Dr. Richardson had endeavoured to ascertain if a temporary action of the heart might be thus produced, so that, under artificial respiration, the pulmonic circulation might be set up. With this view he injected water at 110° into the right common carotid of a goat, killed by chloroform. The current was driven towards the heart, with the object of filling, if possible, the coronary arteries; and artificial respiration was set up. Contractions were soon induced in the muscles of the legs, abdomen, and tail; the action of the heart was also temporarily reduced; but the disintegration of the remaining blood and the infiltration of the tissues prevented complete restoration. It will be advisable in further inquiries to use warm blood itself, or a fluid as nearly as possible identical with it. By the injection of oxygenated blood alone, muscle can be placed in a condition for contracting under galvanism, as has been shewn by the experiments of Brown-Séquard.

By injecting a solution of peroxide of hydrogen into the arterial system of a rabbit four hours after death, the muscles are rendered capable of contracting, though feebly, for many hours under the galvanic stimulus. Gaseous oxygen also, when injected into the arteries, acts similarly on the muscular system; and, when injected into the veins, on the right heart. Injection of oxygen into the carotid artery so that it may reach the heart fails in restoring action; because the whole of the gas is not absorbed, and therefore obstructs the circulation; and because the amount of oxygenation is insufficient to generate the necessary degree of heat.

The injecting of ammoniated blood into the veins or arteries of dying animals was observed by Dr. Richardson, in 1856, to be capable of producing bounding action of the heart, and convulsions—almost tetanic—of the whole body. But, if the ammoniated blood were saturated with oxygen, the effect was neutralised. He had also injected ammonia into the veins in small quantities, keeping up artificial respiration; but the effect was simply to overcome and prevent the further action of the heart.

Dr. Richardson summed up his observations on resuscitation in the following conclusions:—

In restoring animation, artificial respiration should always be first resorted to, in the hope that there may be still some remaining action of the heart. If artificial respiration fail, it need not be tried after fifteen minutes; it will merely cause emphysema. Whenever artificial respiration is used, it would be of great advantage to warm the air to a temperature of 130°. In recovery-houses for the recently dead, a heated room would be a most important addition. If electricity be tried, the positive pole should be passed through the jugular vein or one of the carotid arteries to the heart; while the negative pole, insulated to the tip, should be passed through the wall of the chest to the cardiac structure. The most probable means of resuscitation would be to inject fresh oxygenated blood by the arteries, towards the heart; but it remains still a desideratum to discover a fluid which, when warmed to 96°, will sufficiently represent blood.

Army Medical Service. On February 22nd, the Medical Director-General of the army, Dr. Gibson, C.B., visited the general hospital at Fort Pitt, Chatham, on which occasion the whole of the medical candidates who have just completed the competitive examination for commissions as army surgeons were assembled in the lecture-room at the medical school, when the Director-General delivered an address to them, in which he expressed himself highly satisfied with the progress the students had made in their studies during the brief period since the opening of the school, at the same time announcing that the result of the recent competitive examination for commissions had been exceedingly satisfactory. Between 40 and 50 of the students were present, the whole of whom are expected to be shortly gazetted to commissions. Dr. Gibson, accompanied by Dr. Hume, principal medical officer, and the hospital staff, afterwards made a brief inspection of the hospital, and left the establishment at 2 o'clock.

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ALCOHOL: ITS ACTION AND USES.

The question of the action of alcohol on the system, and its value as a dietetic and therapeutic agent, is now attracting much attention both amongst the members of our profession and the scientific world at large. No doubt can be entertained of the importance of a consideration of the subject—a consideration, however, into which our limits will not allow us fully to enter. If there were one cherished view which we thought chemistry had taught us, it was surely that alcohol was oxidised in the system, and thus made subservient, if not to the formation of some of the tissues of the body, at any rate to the maintenance of animal heat. However indisposed physiologists may have been of late years to give in their adhesion to the theories of Liebig as to the division of alimentary materials, we think that most have been, and probably many will still be, disposed to consider the substance we are speaking of in the light of a heat-producing agent. Our opinions on this point have, however, been somewhat rudely assailed, and the position which alcohol has occupied as a dietetic article is threatened with imminent danger. As from the chemists we received the theory of its combustible nature, so from chemical research and experiments now comes the opposite doctrine of its entire elimination, unchanged, from the body.

Considering the vast amount of alcohol which is daily consumed, whether as a general article of diet, or in the treatment of disease, it becomes a matter of essential importance that correct principles should be laid down with reference to its *modus operandi*, and the manner in which it is disposed in the system. We cordially hail, therefore, the appearance of the work of Messrs. Lallemand, Perrin, and Duroy (*Du Rôle de l'Alcohol et des Anesthésiques dans l'Organisme.* Paris: 1860), which gives us the results of the most recent experiments and researches on the subject.

A careful perusal of this work has convinced us that some of our views of the dietetic value of alcohol require modification; but we cannot on that account allow the evidence which is brought forward, and which does not appear to us conclusive on the point, to make us discard altogether the substance of which we are speaking from our list of alimentary materials.

If we were briefly to sum up the facts which the researches of the above authors seem to have established, they would be these:—That, after any fluid containing alcohol is taken, the latter becomes eliminated, unchanged, by the various secreting organs—the skin—the liver—the kidneys—the lungs; and not only this, but that it is deposited in all the tissues, and can be extracted alike from the substance of the brain, the liver, the muscles, and the cellular tissue, as well as from the blood. It is right to observe that, even when small quantities of alcohol were taken, traces of it could be found in the excretions; thus proving that it is not simply when the substance is taken in excess that it becomes eliminated without change.

From the results of their experiments, MM. Lallemand, Perrin, and Duroy, think they are justified in concluding that all the alcohol ingested, with the exception of a small quantity which they and other experimenters have found converted into acetic acid in the stomach, is eliminated from the body, without undergoing any change whatever; and that in this respect it resembles in its action the various anæsthetic agents, such as chloroform, etc. From these conclusions necessarily follows the inference, that alcohol cannot be considered in the light of an alimentary substance.

We believe Dr. Percy was the first to show that, after poisoning by alcohol, this substance could be found in the ventricles of the brain, as well as in the brain-matter itself; and we are all aware of the fact, that fumes of alcohol are exhaled from the lungs even when only a small quantity of the fluid has been swallowed. The chief points that are new, which have been brought to light by the investigations of our authors, are the elimination of the alcohol unchanged through the medium of the skin, the kidneys, etc.; and its deposit in the tissues generally. It is true that Klenke had demonstrated the presence of alcohol in the urine and bile; but, with this exception, physiologists had advanced the opinion that the secreting organs did not eliminate the substance.

There cannot be a doubt of the great importance and value of the researches of M. Lallemand and his coadjutors; for, supposing their results to be trustworthy—and we believe them to be so—they establish beyond a doubt the fact that, at any rate, a portion of all ingested alcohol may go the round of the circulation, traverse the various capillaries of the body, and, without undergoing any oxidation whatever, be ejected from the system in the different secretions. This portion, therefore, cannot be concerned in building up the fabric of the body, nor can it by its combustion contribute to the maintenance of animal heat. This is surely an important conclusion to have arrived at.

The weak point, however, in the arguments adduced against the value of alcohol as a respiratory food, is the small quantity of it which the experimenters have been able to extract from the various secretions. It is possible that, by more delicate modes of investigation, and by the use of more subtle tests, a much larger proportion may be detected; but we are inclined to think that, until some such result is obtained, physiologists will not be disposed to abandon their views as to the oxidisable nature of the substance.

The readiness with which substances closely allied to alcohol, as ether, etc., will traverse the mucous membrane, and find their way into and out of the blood, will, we think, serve to explain the fact of the ready excretion of alcohol in its passage through the various organs; but this easy excretion does not seem to us to militate against the view that a portion of the substance may be oxidised in the system, and made subservient to alimentary purposes, in proportions varying to the requirements of the system at the time. If, at the time alcohol is taken, there exist other carbonaceous substances in the blood, which are not usually excreted until they have undergone a process of oxidation, it is by no means improbable that the alcohol, being as it were in excess, is not at once seized hold of, and thus a portion of it is allowed to escape. We think that experiments should be made to see whether any difference exists in the proportion of alcohol eliminated after the ingestion of a given quantity of it; first, when food has been long withheld, and again when the system is replete; secondly, under the influence of a low, and again of an elevated temperature. Being a substance easily eliminated, it may, when other foods are abundant, not be made use of; and, on the other hand, in the presence of a starving system, it may be entirely consumed. Such a supposition seems to have some confirmation from the fact which was observed by Dr. Todd, that in cases of great exhaustion, when alcohol is given, no odour of it is perceived in the breath, as is usually the case under ordinary cirsumstances.

Looking, therefore, at the results of M. Lallemand's experiments, and on the face of facts which are patent to us in our daily experience, we are still disposed to hold to the view of the great value of alcoholic fluids, not only as therapeutic agents, but also, when properly used, as articles of diet. If alcohol not be burnt off in the system, how is it that, under the influence of extreme cold, large quantities can be borne, such as, when there is no great demand for the generation of animal heat, would produce prejudicial effects? How is it, again, that we see the confirmed gin-drinker live on, and perform his daily work, with comparatively a very small modicum of food other than the alcohol he consumes? And, lastly, how is it that life may be apparently prolonged for many days solely by the imbibition of alcoholic liquids? We ask these questions, because we feel that they must be answered before we can abandon our faith in the value of alcohol as an article of diet.

It has been a generally received opinion since the investigations of Prout, that alcohol diminishes the amount of carbonic acid excreted by the lungs. According to the most recent experiments on this subject—viz., those of Dr. E. Smith—this statement is only true of *some* alcoholic fluids. Dr. Smith has found that pure alcohol and rum increase the amount of carbonic acid given off; whilst brandy, gin, whiskey, and some other alcoholic preparations, have an opposite effect. This diminution of one of the most important excretions found in the expired air, by the imbibition of some alcoholic fluids, is a very interesting physiological fact. Our space, however, does not permit us to enter into the consideration of the question, as to whether the diminution results from the non-production of the gas in the system, or from its excretion being arrested by the action of the alcohol itself. If the carbonic acid be formed, and not excreted, we cannot conceive that such a result can be other than injurious; but if the alcohol prevent its formation, by virtue of its power to check the waste or metamorphosis of tissue, whatever may be the effect of this in a state of health, there are many conditions of disease in which such a result may be eminently desirable.

Some of the experiments of MM. Lallemand, Perrin, and Duroy, confirm in a remarkable manner previous anticipations of the mode in which alcohol concentrates itself in various organs. We are all aware of its specific action on the nervous system, and of the manner in which it first stimulates and then overpowers the functions of the nervous centres; and we are equally well aware of the prejudicial effect produced on the liver by frequent imbibitions of alcoholic fluids. Analyses of the brain and liver show that a larger proportion of alcohol is found in them than in any other organ of the body, or even in the blood itself; but a curious difference as to the relative proportion which each of these two viscera attracts to itself, as the ingestion of the alcohol takes place through different channels, is clearly established by the experiments of our authors. If the fluid be introduced in the ordinary way through the stomach, then the largest quantity is found in the substance of the liver; but if, on the contrary, it be introduced by injection into the veins, then the proportion is greatest in the nervous centres; thus showing the great affinity which the alcohol has for these latter organs.

We must here leave this subject for the present. We propose in a subsequent article to refer to some points in connexion with the action of alcohol on the circulating system, and to consider briefly its value as a therapeutic agent.

SIR BENJAMIN BRODIE.

We believe that we are not committing any breach of confidence in referring to the fact, that Sir Benjamin Brodie has entirely withdrawn himself from the practice of his profession, and that his London house will soon be in the hands of another. Such an event seems to call for a few remarks; for Sir Benjamin Brodie is not only the marked man of the profession, but he is a man whose whole conduct, throughout his long career, stands before us a model for our imitation. This event, therefore, becomes a public fact.

In retiring from the busy arena of professional life, he takes with him the warmest sympathy and sincere respect of every medical man in this country —we might truly say, of the whole country. He has long been more than tacitly accepted as the head of the profession of medicine in the British dominions, both by his medical brethren and by the public at large. In all cases of doubt or difficulty, in which the interests of the profession have become entangled or compromised, the eyes of the profession have looked towards Sir Benjamin Brodie for aid to a hopeful solution of the difficulty. And it has been so also with the public. His experience, as is well known, has again and again been called upon to instruct and guide the authorities of the country, in matters of importance which required the competence of high professional skill and honour and reputation to deal with them successfully.

And how has this position of such mark been attained? We all well know. The man of science, the man of energy, the man of unsullied honour, of comprehensive, masculine grasp of mind—these are the characters in which he has ever stood before the profession, and in which the profession and the public have accepted him. His breadth of intellect did not permit of his being distinguished by any special character. We may look back into the past; and, whatever we may read of the excellence of the surgical worthies departed, we may still safely affirm that not one of them ever held a higher place in general estimation than Sir Benjamin Brodie holds at this day.

We believe that in these words of laudation we express, without exaggeration, the sentiments of those of the profession who, like ourselves, know Sir B. Brodie only by his reputation; and we thus express our sentiments, because we believe that the moment is arrived when we may successfully urge upon the Sovereign the propriety, the justice, of rewarding such high merit. Here is a great occasion to reward fittingly one who has thus honourably fought the battle of life, and at the same time to perform an act of courtesy and honour to the whole profession, by the elevation of Sir Benjamin Brodie to the peerage. With all our boasted liberalism, there is still too often an impenetrable barrier erected in this country against the political and social advancement of men of science. Other countries would hail such a man, and invite him to their councils, there to give to his country the benefits of his masculine thoughts and extended experience. He would have been asked to take his place by the side of Larrey, Dupuytren, Laplace, Humboldt, Cuvier, and men of that immortal worth. It is, indeed, somewhat strange that a profession which has been, undoubtedly, one of the very foremost in all the great social reforms effected in this country, should have no direct voice in their practical application in Parliament. On constitutional grounds, again, why should our profession alone be unrepresented in the House of Peers? The Bar has its illustrations—and to spare. The Bench has its mitred and monotonous celebrities. Soldiers and sailors, bankers, brewers, cotton merchants, and successful bill-discounters—all these have their voices heard there. Why then is Medicine—its twenty thousand educated men—to be unrecognised there? This claim of admission there for our profession we might make at all times, on the grounds of public utility, and as an act of justice to our profession; but we now think that such a claim could be urged with double force in the case of Sir Benjamin Brodie, he having that prestige and position which so especially fit him for the honour. His mind, still vigorous as ever, would enable him to employ for the benefit of his country that store of long and rare experience with which it is so richly endowed. Every accessory, in short, that could surround a man of science, one could have thought, was present in his case to point him out as a fitting man to enter that House of Peers. One would almost imagine that the sole bar to his admission is the very fact that he is of the medical profession. We nevertheless call the attention of the profession earnestly to a consideration of what we now propose; and we have a conviction that a wide and general expression of the wish of the profession could scarcely remain, in such a case, without response. We candidly say that we know of no other mark of public respect which is worthy of the acceptance of Sir Benjamin Brodie. He is not a man to whom the commonplace of an ordinary testimonial can be offered on such an occasion.

THE WEEK.

We think that the case to be found under the head of our Correspondence is worthy of especial attention. We brought Mr. Henry Lee's views of syphilitic contagion before our readers, for the purpose of having his opinions tested by the experience of the profession. There can be no doubt that cases similar to that recorded by our correspondent occur more frequently than is generally supposed. A man believes himself cured of syphilis, marries, and, to his surprise, finds his wife in a few months affected with secondary syphilis. In such case, so long as it is maintained that syphilis can only originate from a primary chancre, much domestic misery will result, in consequence of the suspicions thereby raised in the husband's mind. Most unjust and unfounded accusations have, indeed, been often made in this way against an injured wife. With the additional light now thrown upon this subject, the occurrence of such cases as the one alluded to is easily explained. The uncured secondary affection in the man furnishes a secretion which inoculates the woman, and produces in her a disease which very much resembles primary syphilis, and is followed by constitutional symptoms. With regard to the absence of induration in the case related by our correspondent, if he will consult Mr. Henry Lee's treatise, he will see that in one class of infecting sores this induration does not occur.

Mr. Dulvey, of Brompton, near Chatham, has forwarded us a copy of a petition which has been presented to the House of Commons, on the subject of the income-tax, in pursuance of a resolution passed at the last annual meeting of the South-Eastern Branch. In a letter, Mr. Dulvey suggests that the petition should be strengthened by other petitions to the same effect from members of the profession, and from the other Branches of the Association. We trust that our readers will adopt the hint thus thrown out; and especially that they will act *at once* with energy and union, making "a long pull, a strong pull, and a pull altogether." The profession has quietly borne the income-tax quite long enough. The following is the petition, which, with the necessary verbal alterations, will serve as a model for others of the kind:—

"*To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.*

"The humble petition of the South-Eastern Branch of the British Medical Association—sheweth,

"That your petitioners, as members of the medical profession, are in receipt of precarious incomes, dependent, more than in any other profession or calling, on the life and health of each individual.

"That, in the assessment of the income-tax, these precarious incomes, liable to cease at any moment from failure of life and health, are taxed at the same rate as incomes derived from realised property, which remain to the possessors, or their families, in case of failure of life or health.

"That your petitioners feel strongly that this equality of assessment produces a real inequality of burthen, which your petitioners feel to be highly unjust to them, as they are thereby to a considerable extent deprived of the means of making that provision for their families, which the precarious nature of their incomes renders more important to them than to the possessors of realised property.

"Your petitioners, therefore, strongly urge upon your honourable House that the barest justice requires that there should be such a readjustment of the tax as will establish a distinction in the rate paid on precarious and permanent incomes.

"That your petitioners do not believe in the alleged impracticability of making such a distinction in the assessment of the rate, and that such a readjustment alone can make the tax tolerable to the professional classes, who now, believing that they have just cause of complaint, humbly address themselves for relief to your honourable House.

(Signed, on behalf of the Association.)
"Fredk. Fry, F.R.C.S., *President.*
"High Street, Maidstone, Kent, Feb. 25, 1861."

Since the completion, at the College of Physicians, of the Gulstonian Lectures by Dr. Brown-Séquard, Dr. Guy has delivered the Croonian Lectures, selecting as his subject the Application of Tabular Analysis to the Discovery of Truth in Medicine and the Allied Sciences; and yesterday (Friday) Dr. T. A. Barker commenced the delivery of the Lumleian Lectures, the subject being Diseases of the Serous Membranes. At the College of Surgeons, Professor Savery brought his course of lectures on the Physiology of Food to a close on Tuesday last; and to-day Professor Quekett commences his course of twelve Lectures on the Organs of Digestion. After this course is ended, Professor Hilton will give six Lectures (in continuation of the subject) on the Influence of Rest in the Treatment of Surgical Diseases and Injuries.

Association Intelligence.

COMMITTEE OF COUNCIL.

The Committee of Council will meet in Birmingham on Monday, the 18th instant, at One o'clock.

Principal Business.—Financial Report; Arrangements for Annual Meeting; Management of the Journal.

Philip H. Williams, M.D., *General Secretary.*
Worcester, March 5th, 1861.

SOUTH-EASTERN BRANCH:
ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

The third and last meeting for the present session will be held at the Sun Hotel, Chatham, on Friday, March 22nd, at 3.15.

Dinner (punctually at 5.30 p.m.) will be prepared for those who may be able to remain.

Trains will leave for London and all stations on the North Kent Line at 8.0 p.m.; for Maidstone at 8.35; and for Rainham, Sittingbourne, and Canterbury, at 7.47.

Gentlemen intending to dine, are requested to give an intimation thereof on or before Wednesday, March 20th, to Mr. Fry, of Maidstone; or to

James Dulvey, *Honorary Secretary.*
Brompton, Chatham, March 7th, 1861.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: GENERAL MEETING.

A general meeting of the Birmingham and Midland Counties Branch was held in the Medical Department of the Birmingham Library, Union Street, on February 14th, 1861. There were present:—Bell Fletcher, M.D., President-elect, in the Chair; and sixteen members.

New Member. Mr. J. Garner, a member of the Association, was elected a member of the Branch.

Papers. The following papers, which will be published in the Journal, were read:—

1. On Puerperal Obstruction of the Pulmonary Artery. By W. F. Wade, M.B.
2. On Idiopathic Tetanus. By M. H. Clayton, Esq.

Special Correspondence.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The medical charities of Manchester are numerous. We have St. Mary's Hospital, for the diseases of women and children, with accommodation for fifty patients; but owing to want of funds not more than about ten beds are usually occupied. There is also the Children's Hospital, containing twenty-five occupied beds, conducted with great spirit. A third charity for sick children is named the Clinical Hospital, but it seems to have been so called on the principle of *lucus à non lucendo*, for it has no beds. We have a Lock Hospital, an Eye and an Ear Institution, and two extensive Dispensaries. There is also a Royal Hospital for Salford, capable of containing forty beds, if funds were to be had to support them. But, by far the most important medical charity of the town, and, indeed, of Lancashire, is the Royal Infirmary. It was founded more than a hundred years ago, and in old prints it is represented as a homely brick building, situated on a gentle elevation, surrounded by fields and trees, with a pleasant pond in front. On the pond are some swans and a boat, and in the latter an active looking figure rowing, probably the idle infirmary apprentice of those days. The scene is greatly changed since then. The Infirmary, entirely rebuilt, and now an imposing structure, still occupies the same spot, but the boat is gone, and the swans, and the pond too, and, instead of trees and green fields, you see a few starveling shrubs scattered over a dingy area that is facetiously called "the garden," while all around extends an endless maze of bricks piled up into huge warehouses and factories, with intervening streets of shops and houses. The Infirmary now stands almost exactly in the centre of the town, in a fine open square, of about three acres. Facing this square are some of the largest and handsomest warehouses in the town, and in front is a flagged esplanade, adorned with the statues of Wellington, Dalton, Watt, and Peel, and defaced by two oblong basins dignified with the name of fountains, but which, in reality, more resemble a couple of gigantic domestic baths.

The Infirmary contains 277 beds, of which 57 are set apart for contagious fevers. This accommodation is not too great, when it is considered that it is almost the sole receiving house for accidents for a population of more than a million, and what with machinery, hoists, collieries, and railways, casualties are exceedingly rife, and of great severity.

Some idea of the desperate nature of the injuries admitted may be gathered by taking the proportion of inquests to the deaths from all causes, and comparing this with the proportion of inquests in some of the metropolitan hospitals. According to returns obtained by Mr. Roberton, in the five years ending June 24th, 1860, the inquests in the Manchester Infirmary were 49.32 per cent., or nearly one-half of the total deaths. In the London Hospital, standing also in a neighbourhood prolific of accidents, the proportion of inquests to the total deaths in 1858 and 1859 was 37.72 per cent.; while in St. Bartholomew's it was only 12 per cent. in 1859. Another way in which the same point is shown, in even a more striking manner, is by comparing the deaths occurring shortly after admission, say within three days, in the Manchester Infirmary and in the London Hospital. In the former, in 1860, there occurred 255 deaths in the surgical and medical wards, and of these 74 took place within twenty-four hours, 22 within two days, and 18 within three days, and ten were brought in dead. In the latter, in 1859, there took place 351 deaths, of which only 19 took place on the first day, 21 on the second, and 22 on the third day. So that 48.6 per cent., or nearly one-half of the deaths occurring in the Manchester Infirmary took place within three days—in other words, half of those that died were admitted in what may be considered a dying state; whereas only 18 per cent. of those dying in the London Hospital expired in three days.

The severity of the cases admitted produces, of course, a high rate of mortality; and Mr. Roberton, who has been devoting considerable attention to the best plan of hospital construction, has fallen foul of the Infirmary on this score. He asserts that the wards are insalubrious, and recommends the building of a new block on an improved principle for the reception of surgical cases. Another gentleman advocates the formation of a convalescent hospital, to relieve the overcrowded wards, and provide a salutary change of air for those who are recovering from amputations and severe injuries. Considerable correspondence has been going on in the local journals, and much misrepresentation and misapprehension are abroad. Mr. Roberton has evidently been betrayed into making statements which he is unable to prove; and in comparing the mortality of the Manchester Infirmary with that of other hospitals, he has undervalued the effect of the excessive severity of the cases admitted. This fact, although impossible of exact calculation, is so important, that unless it is taken into consideration, most fallacious deductions are inevitable. As a proof of this, let me again instance the London Hospital. The total admissions into the Manchester Infirmary in 1860 were 2063, and of these 225 died, giving a death rate of 12.3 per cent. In the London Hospital, for 1859, the total admissions were 3669, and the deaths 343, giving a death rate of 9.3 per cent. The general mortality in the latter is, therefore, 3 per cent. better than in the former; but if you withdraw from the two death lists those who were in a dying state when admitted—that is, those who died in three days—the result is very different. The death rate in the Manchester Infirmary is then reduced to 6.8 per cent., while that of the London Hospital is only reduced to 7.6 per cent.; so that the Manchester Infirmary now stands nearly 1 per cent. better, instead of 3 per cent. worse, than its sister institution.

Our Infirmary is certainly not constructed on the best principle for the reception of these desperate injuries; but great improvements have already been made in it, and the report of the medical committee makes it evident that others are in contemplation. Its situation, for a town site, is an admirable one; and it is difficult to believe that, in the face of the great number and severity of the casualties, any greater salubrity of a rural site would compensate for the speedy aid—when minutes are of importance—and the brief porterage which a central situation secures.

Manchester is to have, this year, the honour of entertaining the British Association for the Advancement of Science. The meeting is to take place on the 4th of September, and active steps have already been taken to provide suitable accommodation for the distinguished visitors, home and foreign, that are expected. A general committee has been formed embracing the names of all the manufacturing, commercial, and scientific notabilities of the town. Sub-committees have also been constituted in connexion with the various sections into which the Association divides its operations. These are already busy in drawing up lists of foreign professors and learned men, celebrated in their respective departments, who are to be invited to the meeting.

On Feb. 1st, the general committee held its first public sitting. Alderman Neild occupied the chair. One of the local secretaries gave an account of the steps already taken, and stated that the guarantee fund raised to meet the necessary expenses of the meeting already amounted to nearly £10,000. Resolutions were passed, exhorting the members of the committee to exert themselves in extending the guarantee list, and in procuring donations. The meeting also pledged itself to do its "utmost to provide hospitable entertainment for the great foreign and other visitors who may attend." Alderman Mackie, in moving this last resolution, said that when he (being the Mayor for that year) invited the Association to visit Manchester, he assured the members that though they might not find as much advance in science in Manchester as they might expect, they would find that the inhabitants thoroughly understood the science of hospitality.

A very large meeting is expected. The time of the year, it is thought, will prove particularly favourable to scientific men, who are nearly all disengaged in the month of September. The central position, the easy access, and wide spread reputation of the town, are likewise expected to attract an unprecedented array of visitors. The two last meetings were not very numerously attended, I believe, by foreigners. Aberdeen was too distant; and the meeting in Oxford took place in July, certainly an inconvenient time for a large number of scientific men. So that there are several circumstances which lead us to anticipate, not unreasonably, a very successful gathering.

We have a flourishing Medical Society in Manchester. It consists of 107 members, and includes all the rising practitioners of the town who are scientifically inclined, and several of the more distinguished older ones. The society is lodged under the roof of the Royal Institution, and possesses an excellent library and reading-room, on the table of which may be found all the British medical periodicals, and a copious selection of French and German serials. The President for the current year, Dr. Clay, has presented the society with a munificent donation of some 2000 volumes, constituting an extensive library of obstetric works, which Dr. Clay has been gradually accumulating for many years, at great cost. The society holds its meetings monthly, and although the papers are usually somewhat lightly got up, in consequence of the society not publishing any *Transactions*, the cases of rare disease and the curious morbid specimens exhibited, with the discussions thereon arising, render our meetings highly interesting and successful.

At a recent meeting, Mr. Lund exhibited a very curious example of vesical calculus from the sheep. The concretion was about the size of a large marble, and weighed thirty-seven grains. It was nearly spherical in shape, and exceedingly rugged on the surface, much resembling a very rough mulberry calculus. When sawn through, the rough outside coating was found to be only about a line thick; and it invested an oval body with a smooth regular outline, abruptly separated from the outer crust. There was no nucleus. The outer crust was brittle, breaking with a lustrous fracture, and of an intensely dark red, nearly black colour. The body was nut-brown, and soft enough to be scraped with the nail; it broke with a clean dull fracture, like a piece of brown catechu. Both body and crust could be readily rubbed to powder. On chemical examination, neither uric acid nor earthy salts could be detected in it. The concretion swelled under the blowpipe into a voluminous carbon, with abundant disengagement of gas, having the odour of burnt horn; finally, it became dissipated by the heat, with the exception of a very scanty ash, which dissolved with effervescence in dilute nitric acid. This ash contained much iron. These reactions proved that the concretion was composed of some animal matter; and, from the presence of iron, it was considered almost certain that the animal matter was no other than dried blood-corpuscles. Brande mentions calculi of phosphate and carbonate of lime occurring in the bladder of the sheep; but the specimen just described appears to be unique. It produced no symptom during life, and was only detected on blowing up the animal's bladder after it was slaughtered.

On future occasions, I shall inform you further of any matter interesting to the medical reader that may transpire in the scientific societies of the town, or in connexion with the meeting of the British Association.

London Wells. I observe in a recent number of the *Builder* a notice in respect of the "Clerk's Well" at Clerkenwell, London, which is very interesting. I see it stated in the London journals that it is in contemplation to remove Holywell Street, Strand, with a view to the improvement of that district of London. I have to express a hope that care will be taken, in that event, to search for and preserve the ancient "Holy Well" of that locality, which still supplies the "old Roman bath" in Strand-lane with the purest water, although the source is still hidden and neglected. It would be found, I have been informed, in some one of the back yards of the present houses in Holywell Street. In these days of public drinking fountains it would afford an inexhaustible supply of pure water; and an appropriate architectural structure erected over it would be an ornament to that frequented locality, and the associations connected with it would gratify liberal and classical taste. It is as old as the days of Julius Cæsar, who, it is said, built the old Roman bath above stated. (*The Builder.*)

Correspondence.

CHLOROFORM, GLAUCOMA, CATARACT, ETC.

Letter from Charles Kidd, M.D.

Sir,—As we are likely soon to arrive at the truth as to the value of the two operations for glaucoma now before the profession, from a calm consideration of that subject, rather than one-sided *à priori* theorising, it is somewhat relevant to these operations to particularise the fact that the most tangible objection of Mr. Hancock to iridectomy is that of the danger or necessity of administering chloroform in these latter cases, but not in his operation. Having carefully watched dozens on dozens of these iridectomy operations under chloroform, I think there is not any accident whatever likely to occur, if the patient, as in cataract cases, is brought *fully* and *deeply* under the anæsthetic. It is not so, however, if the chloroform is exhibited only in very very small quantities, and each small additional dose (as it certainly does) increases the agitation of the patient.

We are still as it were in the infancy of anæsthetics, watching by the cradle of this new birth of our time; and it seems desirable from year to year to seek the advice and opinions of experienced hospital surgeons and others as to whether chloroform increases generally in favour, and what are the conditions where it may be expected to act with the greatest satisfaction and safety; but still we too often overlook the minor question of how to administer it.

We owe the large and interesting subject of "resection of joints entirely to chloroform: whether for good or evil, might form a fit subject of debate at another time; or rather, we owe such operations as resection of the knee—the *experimentum crucis* of resections—not, as often said, to this or that surgical school, but to the secondary accident or subject of etherisation. The diagnosis of very painful diseases about joints, the hip-joint especially, has also undergone a most beneficial revolution from the same cause; and many very painful joints are now saved, which not many years ago would have been removed by amputation; the mobility of the joint, as tested by chloroform, being quite perfect in such cases, which formerly was discovered when the leg or arm was cut off, but now while the limb is still capable of being saved.

Practical men, otherwise (judging in a measure from books and journals) still display the most unnecessary fears occasionally as to the mischievous effects of chloroform. In trephine case (where, unfortunately, about two-thirds of the patients die of the trephine and the original injury, and where chloroform would, *à priori*, be deemed in the last degree dangerous), it has been used with good results. Again, in puerperal convulsions, it is often prescribed in very large doses with wonderful success; and even in cases of placenta prævia and abnormal presentations, with hæmorrhage, it facilitates the operation of turning, without increase of hæmorrhage. In the suffocation of croup in children, another operation where it might be deemed inadmissible, Dr. Fock has given twenty-four cases where chloroform was administered previously to the operation of tracheotomy, and in each case with marked benefit.

In the practice of eye-surgery, these two operations in glaucoma have recently excited immense controversy; many scores of cases have been treated (all the cases alike), one set by one operation, another set by the other, without the slightest difference as to final result, except that one set of cases were benefited, as it was erroneously surmised, by having no chloroform! The real fact is, chloroform in these cases may do mischief, or it may not. *Minimum* doses excite the patient, and throw forward the ball of the eye; the small muscles of the globe, like those of the perinæum in lithotomy, are made rigid; the muscular crura of the diaphragm, through which pass the œsophagus and eighth pair of nerves, are in a similar condition (this latter, I am now certain, is the cause of vomiting). We have, therefore, the danger of this bulging of the eye, aggravated by the vomiting, probable escape of the vitreous, and blindness; but all this is saved by giving the chloroform as deeply as the patient will bear it. Roger de Coverley's *dictum* in the judge's ear, that "much may be said on both sides", rather illustrates the discussion on iridectomy and the danger of chloroform; but this is really the practical explanation of the whole matter.

The vomiting is perhaps the accident most to be feared. The cardiac end of the stomach, with its par vagum, is as sensitive to impressions that cause vomiting as the pyloric end is entirely insensible to such impressions. If the chloroform is pushed well into the third stage, the irritation of the diaphragmatic crura on this part ceases, and so of the spasm of the little muscles in the orbit.

Where vomiting is very troublesome, I have found a little champagne the best of all our remedies, and, after it, creasote, hydrocyanic acid, and the salts of cerium, which probably act in a similar manner.

I am, etc, Charles Kidd.

Sackville Street, Piccadilly, February 23rd, 1861.

GALVANISM, ETC., *versus* THE READY METHOD.

Letter from J. C. S. Jennings, Esq.

Sir,—I have been much pleased with your able leading article of the 9th inst., on the subject of treatment of the drowned; and trust you will not allow the matter to drop until sufficient unanimity has been arrived at by the profession for the guidance of the public. I quite agree with you that, if "there be a matter in which clear and distinct rules ought to be laid down for the benefit of the people at large, this is evidently one."

I was much surprised to see a letter in the *Times* from the Secretary of the Royal Humane Society during the late frost, respecting a case of recovery from drowning, in which allusion was made to the use of the hot bath, thus leading the public to place reliance on an agent which I had hoped was now generally considered as dangerous in the extreme, particularly in unskilful hands, and to which I was the first to call attention in the Journal as long since as April 8th and 22nd, 1853, when I clearly showed what appears to me to be the simple method of treatment of apnœa in drowning. You will also find papers on the subject in the Journal of May 9th and Dec. 9th, 1856, at the time when the late Dr. M. Hall's ready method was under the consideration of the profession. I may here remark, that a late pupil of mine had previously explained the method pursued by me in the case published in 1853, to the gentleman who was experimenting for Dr. M. Hall; and also after he had published his "ready method" in the *Lancet*, I communicated with him on the subject of galvanism, and also sent to the *Lancet* a copy of my letter of May 9th, which, however, did not appear therein. But the following week, or shortly afterwards, Dr. M. Hall's rules were reprinted, with an alteration of the clause in reference to galvanism, viz., that it required to be further tested, or words to that effect; whereas it had been previously rejected by him as useless.

I subsequently introduced the subject for discussion at a meeting of the Bath and Bristol Branch of our Association, and stated that I considered the rules laid down by the "ready method" as too complicated; nor did I believe that any practical man would trust to it in extreme cases. I requested the associates to suspend their judgment until the question had been more thoroughly ventilated. I stated that I for one had found and fully believed that immediate and steady inflation of the lungs from mouth to mouth, with alternate expiration by pressure on the chest, was the most simple and necessary remedy.

I would therefore suggest that the public be informed —1. That death from drowning is caused by suffocation from *want of air*, and *not* from water passing into the lungs. Therefore, *immediately* the body is taken from the water, wipe out the mouth and nostrils, place a bundle of clothes under the shoulders, throw the head back, draw the tongue forwards, then close the nostrils with one hand, and inflate the lungs by placing the mouth to that of the patient, and alternately compress the chest with the other. 2. At the same time, let one assistant strip off the wet clothes and apply warm coverings, whilst another rubs the limbs upwards. Also dash cold water at intervals in the face, and slap the chest occasionally with the corner of a wet towel. 3. Use galvanism, if possible, by applying one wire to the side of the neck, and the other to the region of the heart. 4. After respiration has commenced, and the patient can be conveniently removed, place the feet and legs in hot water, and let the patient inhale ammonia occasionally; afterwards place him in a warm bed, and continue frictions, with hot bricks or bottles placed about him, to maintain warmth. I am, etc., J. C. S. Jennings.

Malmesbury, February 14th, 1861.

WHO IS A DOCTOR?

Sir,—A great deal of learning, but more of special pleading, has been of late displayed in the medical journals on the vexed question of titles, especially of that of "doctor"; and your able remarks on the dispute between the University of Edinburgh and the medical colleges in that metropolis remind me again of the subject.

No doubt custom has led to much looseness in the use of the word. Dr. Johnson, therefore, in his dictionary, is fain to give some of those loose meanings, as secondary, or even tertiary definitions: thus—

"2. A man skilled in any profession;

"3. A physician, one who undertakes the cure of diseases;" and even,

"4. Any able or learned man."

With regard to definition 3, it is observable that we have in that definition the recognition of the well known fact that the word "doctor", in its popular use, means a medical practitioner of any kind, even an apothecary; for one of the quotations in Johnson—"Children will not take medicine from the doctor's hand, which they will from a nurse or mother"—points to the "doctor" as not merely furnishing the medicine, but as actually administering it. Indeed, in this familiar use of the word, it is not unfrequently used as a term of reproach, as the following anecdote, for the truth of which I can vouch, will show.

An old woman in the north of England, who had been for some time under the care of a charlatan for some trifling ailment, without deriving any benefit from his treatment, applied at length to a qualified practitioner, confessing at the same time the fault or mistake she had been committing. "Well," said the practitioner, "and what did Mr. —— say was your complaint?" "Nay," said the old woman, "I would never *mister* a fellow like that; *doctor's* good enough for him."

Again, by a further corruption or perversion of meaning, it is made to signify a man who undertakes to *cure* anything: thus we have *horse-doctor*, *cow-doctor*, and even *chimney-doctor*.

How unsound, therefore, it must be to rely on Johnson's third definition, in seeking to determine who are entitled to style themselves "*doctor*"! Under such a definition, the title ceases to be a distinction, and can scarcely be regarded as a *title* at all. Clearly, according to our old woman's notion, it is, under definition 3, merely the mark of a man's trade or calling, if one would speak contemptuously of him; as if one should say *Tinker Wood*, *Cobler John*, *Souter Johnny*, *Parson Trulliber*, etc. Will any *physician*, legally such, be content to be styled "doctor" in this loose way? It is observable, moreover, under definition 3, that when this word is used by itself, *physic* is implied, never either law, divinity, or music—the other faculties which rejoice in academical doctors.

In like manner as with "doctor", we have three meanings for the words *parson* and *fellow*: thus:—

Parson. 1. A person—the original meaning, under which any one may claim the title; 2. A rector—the precise meaning; 3. Any clergyman; which, as with doctor, is an abusive meaning—a term of reproach.

Fellow. 1. A companion—the original meaning, under which any one may claim the title; 2. A member of a college, or of any incorporated society—the precise meaning; 3. The foolish mortal, the sorry wretch, the mean rascal, a word of contempt—the abusive meaning.

It is clear, I think, that all the meanings under Johnson's third definition have arisen from the abuse of the word "doctor"; so that, if we wish to know what is the proper application of the word as a *title*, we must look to definition 1, which (the precise meaning) is—

"1. One that has taken the highest degree in the faculties of divinity, law, or physic."

It is true that Johnson does not say, "A degree conferred by an university"; but that so much is implied, is obvious from the remark which immediately follows: "In some universities there are doctors of musick."

It is in this sense of the highest degree in a faculty that we have Faust, when expressing the small amount of profit or gratification derivable from the summit of such-like ambition, soliloquising—

> "Da steh' ich nun ein armer Thor!
> Und bin so klug als wie zuvor;
> Heisse Magister, heisse *Doctor* gar," u. s. w.

Some of the letter writers on this subject, who contend for the privilege of using the title for themselves and others who have not graduated in the meaning of Johnson's first definition, argue that, because the word "doctor" is derived from the word *doceo*, and because *doceo* means *to teach*, therefore any one empowered or competent to *teach* medicine is "*medicinæ doctor*". Undoubtedly he is so, if we spoke Latin, which we do not. Dr. Johnson appends to his first definition a sufficient recognition of this meaning, where he says, "In its original import, it means a man so well skilled in his faculty as to be capable of teaching it." And it is evidently only in this meaning that the word is used in the New Testament, Acts v, 34, "A doctor of laws"—a passage quoted by Johnson under his first definition; in the original, Νομοδιδάσκαλος: and in Luke ii, 46, "In the midst of the doctors"—*ἐν μέσῳ τῶν διδασκάλων*; for there were no "universities" and no "degrees" in those days. But in these our days, when there are "universities", chartered as such, with defined privileges and express powers of conferring "degrees", we must not go back to the original meanings of "doctor", "bachelor", "master", and so forth, in seeking their present legitimate application. To revert to the original meaning of the word *doctor* in the present controversy would be as unsound as to accept the loose corrupted meanings given in Johnson's third definition. It would be to err as much on one side as on the other; in either way, the title would cease to be a distinction. And especially would it cease to be a distinction, if the original meaning were taken; for, under that definition, even the despised L.S.A. is more truly a doctor than the licentiate of a college of physicians or the university graduate himself; for by Act of Parliament he alone takes *apprentices*, that word being derived from the French *apprendre*, to learn; so that where a man goes to *learn*, he goes to a *teacher*—a *doctor*.

No, no; the original meaning will not conduct us to the correct application of the title "doctor"; neither will the abused or corrupted meaning; for a M.D., *medicinæ doctor*, is one who has taken that degree at a university, and none other. I am, etc., W.

March 1860.

THE NEW DOCTRINES OF SYPHILITIC CONTAGION.

Sir,—Your leader on syphilis induces me to send you a case of some interest, and in several respects affording confirmation of the views you advocate.

In *August* 1859, a gentleman, after a doubtful intercourse three days previous, consulted an experienced surgeon for an "excoriation". It was pronounced non-syphilitic, was causticked, and immediately got well. *Five weeks* afterwards, he came to me, feeling "out of sorts and bilious", and complaining of (what had often happened before, he told me) an "excoriation" on his penis, which he was most anxious to have cured speedily, as he was to be married in a few days. The "excoriation" presented several small spots of superficial ulcerations on the glans and prepuce, and had only existed a day or two. He was not well by the time fixed for the nuptial ceremony, and suffered a good deal, as might be expected; but soon, under simple treatment, he was quite sound again.

In *November*, he had sore-throat; and the following month, in addition to congested fauces, a yellow spot was observed on one of the columns. Soon after the first appearance of the throat-affection, an erythematous rash was noticed covering the trunk and arms, in the form of annular spots, of from a half to an inch and a half in diameter, and of a faint coppery red tint. Towards the end of December, he suffered from "splitting headache"; and as the throat became better, there appeared on the tongue symmetrical aphthous spots on each side.

In *February* 1860, he was much annoyed by a fixed nebula in the right eye, which for some weeks deprived him of clear vision. In *April*, a scaly patch of eruption appeared on the right side of his neck, and he suffered from a rheumatic pain in the same part for many weeks. In *June*, he had symmetrical scaly patches in the palms of his hands, of annular form and a coppery colour; these spread at their circumference, and got well in the centre, gradually creeping over the ball of the thumb and on to the wrist, occupying several months in the process; and, after being well for a time, reappearing at intervals up to a recent date.

His wife, about five weeks after marriage, suffered from "excoriations", which occasioned tenderness; she had subsequently pain during coitus, which was followed by slight bleeding. No ulcers were discovered. Two or three months after marriage, much irritation (itching and smarting) was experienced about the vulva; and, about the latter date, an eruption came out on the body. About five months after marrirge, she had an inflammatory sore-throat, was sick and ill; she afterwards had a glandular swelling in the groin, and several spots of scaly annular eruption on her neck and face, which soon disappeared under treatment.

This gentleman was treated by several medical men of eminence, who at different times told him he was *not*, and that he *was*, suffering under secondary syphilis! All, however, prescribed antisyphiltiic remedies!

The doubtful points were, the *long period of incubation;* the *absence of induration* and the usual characters of a true syphilitic sore; the slow progress of the disease in its subsequent stages, and the faint characters it presented throughout. The previous history of the patient, who was naturally a dyspeptic, and had in former years been salivated for venereal disease, tended to confuse the diagnosis.

The symptoms in the wife corresponded, but in a modified form, with those of her husband; and similar remedies were, for the most part, employed by both.

Let me echo, in conclusion, the general satisfaction I hear expressed in this neighbourhood at the improvement you have effected in our Journal.

I am, etc.,
An Old Member of the West Somerset Branch.

February 19th, 1861.

THE TURKISH BATH.

Letter from E. Haughton, M.D.

Sir,—I have read with some surprise a letter from Dr. Wollaston on the Turkish Bath, in which he asserts that not only can 150° to 160° Fahr. be borne with impunity, but that this is the temperature actually used by the Turks. The first statement is perfectly true, if spoken of *dry air;* but it must be taken *cum grano salis*, when applied to the bath of the Turks. With regard to the second, however—namely, that it is the practice of the Turks to use such temperatures—I beg to say that he is very singular in his experience; as neither Dr. Richardson, Mr. Kiallmark, nor myself, have ever found this to be the case in the baths visited by us; and I am inclined to think that the presumption is very much against its *ever* being the case.

One of the arguments brought forward in support of his position is certainly very equivocal; namely, that Dr. Barter recommends a temperature of 160° to be used in the sudorific chamber. But it cannot now be unknown to Dr. Wollaston that the baths erected by Dr. Barter are different from the eastern bath, *and profess to be different*. Why then does Dr. Wollaston bring forward the temperature used in them as if the same as the Turkish bath? Any one who is acquainted with them can easily perceive another reason why higher temperatures are used in them. The dryness of the air *necessitates the increase of temperature*, and explains a good many of the statements of Dr. Wollaston. The temperatures mentioned by Dr. Wollaston, in his paper before the British Medical Association, was 150° to 170°; and, although he has since come down ten degrees, he is, in my opinion, still twenty or thirty degrees above the bath of the Turks. He says he has tried them with the thermometer. I answer, so have I.

I am, etc., Edward Haughton.

1, Tithebarn Street, Liverpool, Feb. 25th, 1861.

Teeth of Fishes. In fish, the teeth are scattered everywhere almost within the mouth, even over the bronchial arches and the tongue, sometimes as thickly set spines, in others as recurved hooks. Modifications exist in different species, corresponding to the necessities of organisation and habits, wonderfully demonstrative of the multiform mechanisms with which the Creator endows the irrational world of beings. The myxine, one of the very lowest, feeblest, and contemptible of its kind, in consequence of its dental apparatus, becomes a formidable enemy to the largest monsters of the deep. On the palate a solitary fang-like tooth is placed, and on each side of the tongue two firm deeply serrated plates are attached. The hook is first thrust into its prey, and then these lingual saws are set in motion, which cut their way into the flesh; another hold is taken by advancing the fang, and the saws follow, until finally the very interior organs of life are reached. (*Dr. Agnew.*)

Medical News.

The Order of the Bath. Her Majesty the Queen has been graciously pleased to make and ordain a special statute of the order of the Bath, appointed a number of officers to be extra members of the Military Division of the Third Class, or Companions of the said order; among whom are the following members of the medical profession:—

Currie. Deputy-Inspector-General Samuel, M.D.
Mackenzie, Deputy-Inspector-General Thomas, Bombay Establishment
Mackinnon, Inspector-General Campbell, M.D., Bengal Establishment
Muir, Inspector-General William Moore, M.D.

Apothecaries' Hall. On Thursday, February 28th, the following licentiates were admitted:—

Howarth, George, Southport, Lancashire
Orton, Theodore, Matlock Bath, Derbyshire
Skrimshire, J. T., Holt, Norfolk
Thorp, Sidney, Maldon, Essex
Watts, John, Haverfordwest

APPOINTMENTS.

Royal Navy. The following appointments have been made:—

Coates, Matthew, Esq., Assistant-Surgeon, to the *Recruit*.
Olive, Edwd., Esq., Acting-Assistant-Surg., to the *St. Jean d'Acre*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Manifold, Assistant-Surgeon W. H., to be Surgeon 1st Lancashire Engineer Volunteers.
Taaffe, R. P. B., Esq., to be Surgeon 1st Sussex A.V.
Taylor, J. S., M.D., to be Assistant-Surgeon 70th Lancashire R.V.

To be Honorary Assistant-Surgeons:—

Cochrane, G., Esq., 5th Suffolk R.V.
Godden, J., Esq.. 2nd Company Cheshire R.V.
Jeans, J. H., M.D., 2nd Hants Light Horse Volunteers.
Simmons, T. R., Esq., 1st Sussex A.V.

DEATHS.

Adams, Francis, M.D., LL.D., at Banchory, aged 64, on Feb. 26.
Barker. On March 5th, at Bedford, aged 44, Elizabeth L., wife of *T. Herbert Barker, M.D.
Bridges. On December 7, 1860, at Melbourne, Susan, wife of John H. Bridges, M.D.
Burns. On March 4, at Brompton, Chatham, aged 8 months, Alfred E., youngest son of *J. J. D. Burns, M.D., R.N.
*Leack. Richard, M.D., at Blackburn, aged 46, on February 21.
Williamson. On January 3, at the Cape of Good Hope, aged 3 months, Frances A., daughter of G. Williamson, M.D., Staff-Surgeon.

The Great and the Little. M. Van Beneden, in a memoir entitled "*The Great and the Little*," desires to show that the little—microscopic—animals exercise a greater influence over the earth, by reason of their prodigious number, than do the large mammifers.

The Mortality from Amputation at the Thigh has been variously estimated: "at the Hôtel-Dieu, about 60 per cent. die; in the London hospitals, about 44; in the Edinburgh hospitals, 49 per cent. die. The result of Paul's large statistic gathering is, that of 1,003 cases, 454 die, or 45.27 per cent.," says Mr. Barwell.

Spontaneous Generation. M. Pouchet, the great modern champion of the spontaneous generation, has brought under the notice of the Academy a fact which he asserts is a puzzler for his opponents. He has observed that the yeast plant is derived from a granule which is *spontaneously* developed in fermenting liquids, and produces germs which do not resemble the parent granule, and are incapable of producing any other growths. M. Pouchet has given careful illustrations of these objects, however strange they may seem.

King's College Hospital. The annual meeting of this charity was held last week. The in-patients during the past year amounted to 1,333, and the out patients to 31,196; cases of midwifery to 624. The average time the in-patients were in the hospital was thirty-three days, and the average cost to the hospital £4 11s. The zeal and devotion of the members of St. John's House had conferred great benefits on the institution by their connexion with it. Their system of nursing had been very beneficial to the hospital, and the governors had accepted an offer made by the lady-superintendent of St. John's House to increase the efficiency of the hospital. The offer made was to place a separate space as a lying-in ward under the control of Dr. Farr, and the associated sisters of St. John's House would bear the entire expenses of it, by which means a body of efficient nurses would be provided. The committee were happy to be able to announce the approaching completion of the second and largest portion of the hospital.

Royal Medical and Chirurgical Society. The annual general meeting of this society, for the election of officers and other members of the Council for the ensuing year, and to receive the auditor's report and the report of the Council, was held on Friday, March 1st. The society was pronounced to be in a very prosperous state. The proposed amalgamation—first brought forward by Mr. Charles Hawkins—of the different societies is, we regret to say, postponed, on account of certain technical and other difficulties which have arisen to prevent its being carried out. The following gentlemen were elected officers for the ensuing year:—*President:* Benjamin G. Babington, M.D., F.R.S. *Vice-Presidents:* Thomas G. Balfour, M.D., F.R.S; Charles J. B. Williams, M.D., F.R.S.; Henry C. Johnson; James Paget, F.R.S. *Treasurers:* Thomas A. Barker, M.D.; Charles Hawkins. *Secretaries:* Edward H. Sieveking, M.D.; Charles H. Moore. *Librarians:* Andrew W. Barclay, M.D.; George D. Pollock. *Other Members of Council:* William R. Basham, M.D.; Thomas K. Chambers, M.D.; Daniel Maclachlan, M.D.; Henry A. Pitman, M.D.; William Wegg, M.D.; John A. Bostock; Samuel Cartwright, jun.; William Cathrow; George L. Cooper; Richard Partridge, F.R.S. The retiring President, Mr. Skey, wound up the proceedings with an eloquent address. He alluded to the losses by deaths which the society had suffered during the past year, and dwelt feelingly and forcibly on the untimely end of Dr. Baly, one of his own colleagues, of whose character he gave a sketch. The thanks of the society were given to the retiring Secretary, Dr. Barclay, whose untiring energy, punctuality, skill, and uniform courtesy, in the discharge of the burdensome duties attached to his office were warmly eulogised by the President.

Health of Scottish Towns. The Registrar-General reports that the deaths in the eight principal towns of Scotland in January last—2,779—greatly exceeded those of any January since the Registration act came into operation in 1855. This is partly to be attributed to the prevalence of small-pox, scarlatina, and diphtheria, and partly to the severity of the weather at the close of the last year and the opening of this, though Scotland has again been better off in this respect than might have been expected from its high latitude. Indeed, at Aberdeen, the thermometer never fell below 19 deg. in Jan., while at the Royal Observatory, Greenwich, nearly six degrees further south, it was at 16 deg.; at Paisley, however, it marked 8 deg., and at Perth 10 deg. The deaths in the eight towns in the year 1860 (26,028) were in the high proportion of 286 in every 10,000 of the estimated population. It would be understating the facts to say that for every four persons who died in London last year five died in the Scottish towns; it would be nearer the truth, and a very little way from it, to state that for every three deaths in the metropolis there were four in the Scottish towns. In Glasgow half the deaths in the year were of children under five years of age. The mortality was heaviest in Glasgow and Greenock. In Edinburgh it was but 229 in the 10,000, and the Registrar-General notices the advantage that city possesses in its exposed site on sloping hills, and the consequent thorough ventilation of even its most densely-peopled low streets and closes; were its drainage, surface as well as underground, and its sanitary arrangements in the lowest class of dwellings somewhat improved, and overcrowding prevented, he has no doubt that it would prove one of the very healthiest towns of the kingdom.

Coal Tar Soap for Medicinal and Hygienic Purposes. M. Demeaux, whose researches into the value of various disinfectants, conducted in conjunction with M. Corne, have acquired considerable reputation; has recently announced the discovery of a means by which coal-tar can be made up into the form of a soap. This product, which from the facility with which it may be prepared, from its moderate cost (which is less than sixpence for each pound), from the quantity of coal-tar which it contains, and from its ready solubility in water, appears destined to be of great service, is prepared in the following manner:—Take of coal-tar, soap, and alcohol, equal parts, mix, and warm over a water-bath until entirely dissolved. Upon cooling, a perfect soap is obtained, which is very soluble in water, and forms, upon being dissolved in that liquid, a permanent emulsion. This preparation would be found very useful, whether in hospitals, in dissecting-rooms, or in manufactories, for the purpose of preventing real dangers to health, or of counteracting emanations which are both unpleasant and unwholesome. The emulsion of coal-tar might be employed in baths or in lotions and fomentations to the body, and be productive of good results in certain diseases of the skin; body or bed-linen might be impregnated with it, and also dressings for patients, whose excretions are of a fetid character. Its ready solubility in warm or cold water would prevent it from staining the body or the clothes. (*London Medical Review*).

The Bottom of the Sea. Our investigations go to show that the roaring waves and mightiest billows of the ocean repose, not upon hard or troubled beds, but upon cushions of still water; that everywhere at the bottom of the deep sea the solid ribs of the earth are protected, as with a garment, from the abrading action of its currents; that the cradle of its restless waves is lined by a stratum of water at rest, or so nearly at rest, that it can neither wear nor move the lightest bit of drift that once lodges there. The uniform appearance of these microscopic shells, and the almost total absence among them of any sediment from the sea or foreign matter, suggest most forcibly the idea of perfect repose at the bottom of the deep sea. Some of the specimens are as pure and as free from sea-sand as the fresh-fallen snow-flake is from the dust of the earth. Indeed, these soundings almost prove that the sea, like the snow-cloud with its flakes in a calm, is always letting fall upon its bed showers of these minute shells; and we may readily imagine that the wrecks which strew its bottom are, in the process of its ages, hidden under this fleecy covering, presenting the rounded appearance which is seen over the body of the traveller who has perished in the snow-storm. The ocean, especially within and near the tropics, swarms with life. The remains of its myriads of moving things are conveyed by currents, and scattered and lodged in the course of time all over its bottom. This process continued for ages has covered the depths of the ocean as with a mantle, consisting of organisms as delicate as hoar-frost, and as light in the water as down is in the air. The tooth of running water is very sharp. See how the Niagara has cut its way through layer after layer of solid rock. But what is the Niagara, with all the fresh water courses of the world, by the side of the great currents of ocean? And what is the pressure of fresh water upon river beds in comparison with the pressure of ocean water upon the bottom of the deep sea? It is not so great by contrast as the gutters in the streets are to the cataract. Then why have not the currents of the sea worn its bottom away? Simply because they are not permitted to get down to it. (*All the Year Round.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.

Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.

Wednesday...St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.

Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.

Friday. ...... Westminster Ophthalmic, 1·30 p.m.

Saturday.....St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 8.30 p.m.: Mr. T. Bryant, "Suggestions for an Improved Practice in Strangulated Hernia."—Royal Geographical.

Tuesday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."—Royal Medical and Chirurgical, 8½ p.m.: Dr. Markham, "On the Mechanism of the Action of the Valves of the Heart;" Mr. Toynbee, "On Molluscous Tumours in the External Meatus."—Zoological.

Wednesday. Royal College of Physicians, 4 p.m.: Dr. T. A. Barker, Lumleian Lecture.—Society of Arts, 8 p.m.—Microscopical.—Royal Society of Literature.—Chemical.

Thursday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."—Royal Antiquarian.

Friday. Royal College of Physicians, 4 p.m.: Dr. T. A. Barker, Lumleian Lecture.—Statistical (Anniversary).—Royal Institution.

Saturday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."

POPULATION STATISTICS AND METEOROLOGY OF LONDON—March 2nd, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys ..1020 Girls..1008	2028	1238
Average of corresponding weeks 1851-60		1762	1387

Barometer:

Highest (Mon.) 30.039; lowest (Fri.) 29.490; mean 29.800.

Thermometer:

Highest in sun—extremes (Tu.) 88 degrees; (Sun.) 49 degrees.

In shade—highest (Fri.) 53 degrees; lowest (Wed.) 30.7 degrees.

Mean—42.5 degrees; difference from mean of 43 yrs.+2.8 degs.

Range—during week, 22.3 degrees; mean daily, 12.6 degrees.

Mean humidity of air (*saturation*=100) 94.

Mean direction of wind, N.E. and S.W.—Rain in inches, 1.05.

TO CORRESPONDENTS.

⁂ *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

Dr. Thudichum's letter shall, if he pleases, appear in our next, as we have not space for it in this number of the Journal. We think he would do well to alter some of the expressions in it.

THE JUNIOR MEDICAL SOCIETY OF LONDON.—The first general meeting of all the Medical Students' Societies connected with the different hospitals in London, will take place at King's College, Strand, on the 12th instant, for the purpose of taking into consideration the constitution proposed for the Junior Medical Society of London, by the Provisional Council elected from those Societies.

THE DANGERS OF WET-NURSING.—SIR: *Apropos* of "wet-nursing", the following story may amuse your readers. It was given in the *Chemical News*, in a review of a work entitled the *Practice of Hiring Wet-Nurses*. The story is quoted by Southey from Hoare's *Giraldus*.

"In our days a strange occurrence happened in the same district. A wild sow, which by chance had been suckled by a bitch famous for her nose, because so wonderfully active in the pursuit of wild animals, that in the faculty of scent she was greatly superior to dogs, who are assisted by natural instinct as well as by human art; an argument, that man (as well as every other wild animal) contracts the nature of the female who nurses him." I am, etc., CHEMICUS.

The letters of Laicus and his friend, and those of Mr. Daniell and Mr. Gardner, shall appear in our next number.

COMMUNICATIONS have been received from:—Dr. P. H. WILLIAMS; Dr. W. HINDS; Mrs. M. A. BAINES; Dr. SKINNER: THE MEDICAL OFFICERS OF "THE LONDON SURGICAL HOME"; Dr. W. BUDD; Mr. J. H. CRISP: Mr. SAMUEL WOOD; Dr. DULVEY; Mr. J. G. APPLETON; Dr. THUDICHUM; Dr. J. G. SWAYNE; Mr. A. PRICHARD; Dr. DAVEY; Mr. ORMEROD; Dr. WATERS; Dr. SANDWITH: Dr. J. RUSSELL; Mr. BAILEY; Dr. T. K. CHAMBERS; and THE REGISTRAR OF THE MEDICAL SOCIETY OF LONDON.

BOOKS RECEIVED.

1. A Manual of Qualitative Analysis. By Robert Galloway, F.C.S. London: Churchill. 1861.
2. Clinical and Pathological Notes on Pericarditis. By W. T. Gairdner, M.D. Edinburgh: Sutherland and Knox. 1860.
3. Principles of Forensic Medicine. By Wm. A. Guy, M.B.Cantab. Second Edition. With numerous Illustrations on Wood. London: H. Renshaw. 1861.
4. Ale, Wine, Spirits, and Tobacco. A Lecture delivered before the Leicester Literary and Philosophical Society. By John Barclay, M.D. London: Bosworth and Harrison. 1861.

ADVERTISEMENTS.

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HENRY BRETT and CO., Old Furnival's Distillery, Holborn.

Society for Relief of Widows and ORPHANS of MEDICAL MEN in London and its vicinity, 53, Berners Street. W. Instituted 1788.

The SEVENTY-THIRD ANNIVERSARY DINNER of this Society, will be held at the Albion Tavern, Alderagate Street, on THURSDAY, the 4th of APRIL, 1861.

THOMAS ARTHUR STONE. Esq., President in the Chair.

Dinner to be on the Table at half-past Six o'clock. Tickets, One Guinea each, to be obtained of the Stewards, of the Secretary, and at the Tavern.

For the small sum of Two Guineas annually, every member of this Society, of two years standing, may preacrve his Widow or Children from want. £1828 10s. were given in relief last year by this Society. Thirty-eight Widows received from £35 to £40 each, twenty-five Orphans from £12 to £25 each. Also three Orphans had grants "towards self-maintenance," and two Widows extra relief owing to permanent illness.

S. W. J. MERRIMAN, M.D., Secretary.

Fourth Edition, just published, price 2s. 6d., by post for 32 stamps,
A Guide to the Treatment of DISEASES OF THE SKIN; for the Use of the Student and General Practitioner. By THOMAS HUNT, Surgeon to the Western Dispensary for Diseases of the Skin. This edition contains two new chapters; one on the Vegetable Parasites of the Human Skin, the other on Metastasis in its practical bearings.
London: T. RICHARDS, 37, Great Queen Street.

The Microscope in its Application to PRACTICAL MEDICINE. By LIONEL S. BEALE, M.B., F.R.S. Second Edition, re-written, pp. 400, 270 Woodcuts and a Coloured Plate, 14s.

ARTIFICIAL FEEDING v. WET NURSING.
The Comparative Properties of HUMAN and ANIMAL MILKS, suggesting a System by which Infants may be Hand-reared with success. A Paper read before a Medical Audience. Price 1s.

"I perfectly agree with the authoress who says that she believes, where children cannot obtain mother's milk, the best substitute is cow's milk, mixed with a certain quantity of farinaceous food."—*Dr. Edwin Lankester's Lectures on "Food."*

Also,

THE PRACTICE OF HIRING WET-NURSES, especially those from the Fallen,—considered as it affects Public Health and Morals. Price 1s. By M. A. BAINES.

"The Authoress strikes at the root of this wet-nursing evil, and in all she says we most cordially agree."—*Medical Times and Gazette.*

N.B.—The profits that may arise from the sale of the last-named work, will be devoted to the funds of that excellent charity, the Brighton and Hove Lying-in Institution, West Street.
London: CHURCHILL, New Burlington Street, and of all Booksellers.

Sixth Edition, price 12s. 6d.
Hooper's Physicians' Vade-MECUM; or a Manual of the Principles and Practice of Physic. Enlarged, Improved, and carefully Corrected to the present time, by Dr. GUY.
London: HENRY RENSHAW; WHITTAKER and Co.; SIMPKIN and Co.; J. CHURCHILL; HOULSTON and Co. Edinburgh: A. and C. BLACK; MACLACHLAN and Co. Dublin: FANNIN and Co.

Just published, the Eighth Edition, price 12s. 6d.
Druitt's Surgeons' Vade Mecum: a Manual of Modern Surgery. The Eighth Edition, much enlarged, improved, and illustrated by 328 highly finished wood engravings.
London: HENRY RENSHAW, 356, Strand; and
JOHN CHURCHILL, New Burlington Street.

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A Grammatical Introduction to the LONDON PHARMACOPŒIA, and a KEY to PHYSICIANS' PRESCRIPTIONS. By F. S. LEACH.

"This little work will be found extremely useful to students who have received but an imperfect classical education."—*The Lancet.*

HUGHES and BUTLER, Medical Booksellers and Publishers, 15, St. Martin's-le-Grand.

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Uſual Diſcount to the Profeſſion.
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Clinical Observations

ON

INJURIES TO THE EXTERNAL AUDITORY MEATUS.

DELIVERED AT ST. MARY'S HOSPITAL.

BY

JOSEPH TOYNBEE, F.R.S.,

AURAL SURGEON TO THE HOSPITAL; THE ASYLUM FOR THE DEAF AND DUMB; ETC.

Two cases in which the external meatus had been wounded having recently been under my care in the hospital, I think it desirable to make some observations on them.

Wounds of the outer auditory meatus usually occur as the result of accidents; but in neither of the cases lately before us was accident the cause. You will remember that in one case the meatus was injured by a piece of pointed wood introduced into his own ear by a child; in the other case, the meatus was wounded in the attempt to remove a foreign body from its cavity. The history of the first case was to the effect that—

The child, ten years of age, had pushed a piece of pointed wood, half an inch long, into the left ear; it then cried as if in pain, and was taken to a neighbouring surgeon, who endeavoured to remove the foreign body but without success. Three days afterwards, the child was brought to the hospital. Upon examination, the dermis of the meatus was red, greatly tumefied; and at the floor of the meatus a wound half an inch long was distinctly seen. The margins of the wound were thick and red. There was a small quantity of discharge at the floor of the meatus. After careful syringing with warm water, the tube was explored by aid of the gas-lamp, but without the detection of any foreign body. The meatus was ordered to be syringed gently with warm water once daily, and a mild astringent of sulphate of zinc to be applied on cotton wool, and slight counter-irritation was produced behind the ear.

The child did not return to the hospital; and I doubt not that, according to the general rule in similar cases, it speedily recovered. The second was somewhat different. The account received, is as follows:—

A child was taken to a medical man some hours after it had pushed a pebble into the right ear. No pain was complained of. The surgeon introduced a probe into the meatus, and feeling some hard substance there, he endeavoured to remove it by the aid of instruments. Considerable pain followed the attempts at extraction; but no foreign body was dislodged. The child had pain in the ear during the succeeding night and day, and was then brought to the hospital. The meatus externus was found to be very red and tumefied, but neither wound nor discharge was visible. Upon exploring the meatus by aid of the gas-lamp, as completely as its tumefied condition would permit, no foreign body was detected. Fomentations and poultices were prescribed. A week afterwards, the child was brought back to the hospital, the tumefaction of the dermis had subsided, and a stone was distinctly seen by the aid of the lamp. The use of the syringe and warm water dislodged it in a few seconds.

The two cases briefly referred to are calculated to teach a lesson that ought not to be forgotten.

First. It cannot be too widely known that, as a general rule, when a child is brought to a medical man for the purpose of having a foreign body removed from the outer meatus of the ear, *in reality no foreign body is present.* Many lives have been sacrificed from the attempts to remove ideal foreign bodies from the ear.

Secondly. The dermis of the outer meatus will tolerate the presence of foreign bodies, especially those which are smooth, without inflammation or pain resulting. It is well known that accumulations of hard wax often remain in the ear for many years without causing any irritation; indeed, in my work on the *Diseases of the Ear* I cite a case where a percussion cap remained in a woman's ear for fifteen years, without producing any result excepting deafness.

Thirdly. Considering that the inner part of the bony auditory meatus is covered by so thin a membrane that the bone can usually be felt hard and resisting beneath it, the surgeon should be cautious in not trusting to the sound or sensation produced on exploration with a probe: *his diagnosis ought always to be formed upon the conjoined testimony of the senses of touch, hearing, and sight.*

Fourthly. When there exists or not any doubt as to the presence of a foreign body in the outer meatus of the ear, syringing with warm water, is, as a rule, the sole admissible operation. The exceptions to this rule are not frequent.

Seeing the great vascularity and the high nervous sensibility of the dermoid meatus, it is remarkable how rapidly its wounds heal. You may recollect the case of an itinerant German clock-maker who was admitted into the hospital a year or two since, having the hooked end of the pendulum of a clock firmly impacted in his ear. My house-surgeon at that time (Mr. Lawrence) was obliged to use all his strength in order to withdraw it; the soft meatus was much lacerated, and indeed the bone denuded and scraped; the patient nevertheless recovered in a few days without any bad symptom.

While speaking to you on the subject of injuries to the external tube of the ear, I may appropriately refer to two cases which I have recently treated in private practice. One was that of a young gentleman who, while hunting, rode at a full gallop along a green road traversing a wood. He was seen to fall suddenly from his horse; when lifted up he was insensible, and blood flowed from his left ear. Upon recovering his senses he was found to be much bruised on the left knee aud shoulder. The accident had been caused by his having been violently swung against a large branch of a tree, the concussion being so powerful as to dislodge him from his saddle. The source of the blood was not ascertained at the time, but upon his consulting me on the subject some days afterwards I was able to allay all alarm, by pointing out that the dermoid meatus had been lacerated, most probably by some twig of the branch which had struck him down; the wound was nearly healed.

The second case was that of a middle aged gentleman who, while shooting during the recent intense frost, pushed his way through a hazel plantation. In the midst of it he was seized with an intense pain in the right ear, and for a few moments he was stunned. Upon inspection, I found a small lacerated wound in the external meatus at its upper posterior part, and an aperture in the corresponding portion of the membrana tympani. These injuries had doubtless been effected by a frozen hazel twig, having been driven into the ear. Both wounds healed without any evil consequences.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ROYAL LONDON OPHTHALMIC HOSPITAL.

ACUTE GLAUCOMA OF BOTH EYES, SUCCESSFULLY TREATED BY IRIDECTOMY.

Under the care of J. Dixon, Esq.

Mrs. P., aged 46, was admitted December 27th. She was a thin, moderately florid woman, not subject to gout or rheumatism. Twelve days before admission, she had severe pain in the right eye, which came on suddenly at night. Next morning, she found that she could scarcely see with it; and the pain, still severe, had continued up to the time when Mr. Dixon saw her. Blisters and various applications had been used, but without any benefit. When admitted, she could with the affected eye only just distinguish light from darkness, and could not count fingers held up between the eye and the light. The sclerotic was dusky, leaden-coloured, and crossed by enlarged veins. The pupil was dilated moderately, and fixed. The fundus, as seen through the pupil, looked dull and yellow. The cornea had lost its brilliancy. Atropine did not produce any effect on the size of the pupil; whilst in the other eye the pupil readily dilated under its use. The ophthalmoscope was used; but a mere red reflex from the fundus was seen. The woman would not submit to the operation of iridectomy, which was at once proposed, until the 31st, the fourteenth day from the attack, when iridectomy was performed. The piece of iris removed was from the upper part. No chloroform was given. The pain was at once relieved.

Four days after the operation, she had had no return of pain, and could read No. 10 of Jäger's test-types. There was a minute fistula in the cornea, to which Mr. Dixon applied nitrate of silver. She gradually improved, and was soon able to read small type.

On January 25th, the left eye became suddenly very painful. The pain was in the globe; it was very intense, and was accompanied by vomiting. She was not seen by Mr. Dixon until the 28th. He then found that the eye was in exactly the same state as the right had been. She could only just count fingers. The pupil was dilated and fixed; and the fundus could not be illuminated by the ophthalmoscope. Iridectomy was at once performed, and with the same amount of success as attended the operation on the other eye. She can now see well with both eyes, and can read pearl type without the aid of glasses.

Mr. Dixon remarked that, in this case, the disease had been of the exact form to the relief of which iridectomy is best suited; viz., *acute* glaucoma. In the chronic cases, as far as he had seen, little or no benefit followed the operation, but rather an increase of the irritation. It is interesting to note that the attack in the left eye occurred whilst the right was going on satisfactorily. The ophthalmoscope had not been used to examine the sound eye, and therefore no blame was traceable to it, as having re-excited the disease in it. The occurrence of glaucoma in the second eye a few weeks after it has attacked the first is quite in accordance with what is frequently observed; and hence, as both eyes generally suffer, the value of iridectomy is much increased.

Original Communications.

MEDICAL PSYCHOLOGY.

By Robert Dunn, F.R.C.S., etc.

The following article will comprise a brief exposition of the leading phenomena of the mental states, and of the nervous apparatus through which they are manifested, with a view to the better understanding and elucidation of the mental phenomena or symptoms of disease.

It cannot be disputed that the influence of the bodily states upon the mental manifestations presents a subject for investigation as interesting and important to the medical practitioner, as it is to the psychological inquirer or mental philosopher. Nevertheless, it has long been the abiding conviction of my own mind, that in the general practice of medicine, the psychological phenomena, or symptoms of disease, have been too much unheeded by us. Under the influence of this conviction, and with a view to the better understanding and appreciation of their value and importance in the practice of medicine, it has appeared to me that a summary survey of the correlation of psychology and physiology—a brief exposition of the leading phenomena of the mental states, and an inquiry into the nervous apparatus, through which they are manifested in the life—would form a useful contribution, as introductory to the systematic study of medical psychology. It could scarcely fail of being interesting and instructive to the young psychological inquirer; and it might prove suggestive, and even of some value and importance to the thoughtful and experienced medical practitioner.

As a labour of love, I have thrown into shape my own meditations on the subject; and, in submitting them to the candid consideration and free discussion of others, I am not without the hope that I may be instrumental, among my professional brethren, in rousing into activity the energy of other minds, of higher intellectual endowments, possessing more leisure, and having better opportunities than I can command, for the prosecution of such an interesting subject of inquiry. Of the practical value and importance of the subject, there can be no dispute. For, as the seat of consciousness, of feeling and emotion, as well as of the higher attributes of reason and reflection, the human mind, alike in its normal and abnormal aspects, ought surely to be studied in the correlations of organisation and of consciousness, and in connexion with the material conditions of the brain; since it is upon the vesicular matter of the encephalic ganglia, as its substratum, that the mind is dependent for the manifestation of all its activities throughout the totality of life in health and in disease. And to search after the phenomena in which the relations of the bodily states and the mental manifestations are revealed, with the unprejudiced eye of experience; to investigate them scientifically in every point that is of importance to the medical practitioner; and to collect them into one whole, has been justly defined as the province of medical psychology; and, "although," as Dr. Reid has well observed, "the labyrinth may be too intricate, and the thread too fine, to be traced through all its windings, still, if we stop where we can trace it no further, and secure the ground we have gained, there is no harm done (but, surely much good effected); and a quicker eye may in time trace it still further."

I. *On the Normal Phenomena of the Mental States.* We have first to consider the leading phenomena of the mental states. Now, the more closely we observe and diligently study the composite nature of man, as an animal and social, a moral and religious, as well as an intellectual and thinking being, the more clear and irresistible becomes the conviction that he is born into the world, not "a mere blank recipient of impressions," but endowed with inherent cravings and impulses, animal appetites and instincts; with personal or individual, and with social propensities and affections; and with emotional, moral, and religious intentions and feelings, as well as with intellectual faculties—reasoning and reflecting powers. In the primordial cell of a human organism are potentially contained the vital, nervous, and mental forces. Inherent in it are the vital powers of nutrition, development, and growth, under which, *in utero*, duly supplied with the nutrient pabulum, the bodily fabric is evolved and built up, in accordance with all the subsequent wants of the future man; not only the osseous, muscular, and vascular systems, but the nervous system also, upon the encephalic ganglia of which, as its substrata, the mind itself is dependent for the manifestation of all its phenomena in this life.

The germs (so to speak) of all our mental activities, sensational, perceptive, and intellectual, are present from the first. They exist implicitly, *ab initio*, as constituent elements, in every *mens sana;* and they are all, in due order, evolved explicitly, as the successive phases of consciousness become developed. And while, on the one hand, we cannot by teaching or training educe or bring forth a new mental faculty any more than we can make a new law of nature or a new organ of sense, so, on the other hand, before all teaching or culture, the instructive intuitions of the mind, sensational, perceptive, and intellectual, as original principles, are spontaneously developed in the successive phases of consciousness. And first in the order of time are evolved the sensational intuitions of the mind; for the senses come into play from the moment of birth, and among these, as primordial, are those of feeling and touch—universal, or common to all, and the most essential to human existence. Next follow the perceptive intuitions—ideas—the ideation, or intuitions of the perceptive faculties; and such are our immediate cognitions of external objects, their sensible qualities and physical attributes—our moral intuitions of right and wrong—of the true, the beautiful, and the good; and our religious and emotional intuitions—of awe, wonder, veneration, and reverence, inspired and awakened by objects of sublimity, grandeur, vastness, and mystery.

Lastly, arise the intellectual intuitions—our primitive beliefs and primitive judgments. Such our belief is in our own conscious and abiding existence, in our personal identity, and in the existence of an external world. Among our primitive judgments, instantaneously and intuitively formed, we may instance those in relation to the differences in objects or things when compared together; such as that "the whole is greater than a part"; that for every known effect there must be a cause; that it is impossible for a thing to exist and not to exist at the same time; etc.

After birth—that is, as soon as embryonic life is passed, and an independent individuality is established, with the organic vital powers of nutrition, development, and growth—the animal functions, and their allied appetites and instincts, come into action; and then, too, the nascent consciousness becomes awakened, but which is purely sensational at first, for man is at birth the mere creature of sensation and instinct. And thus his outer life begins with consciousness, and with consciousness it ends; but, as for consciousness itself, that is an ultimate fact, beyond which we cannot penetrate. It is an essential attribute of animal life, and the primary and universal condition of intelligence—in a word, it implies *mental existence.* It is equivalent to the knowledge that we possess of our own personal identity, for it is involved in every sensation which we experience, and every mental act that we perform, in feeling, perceiving, thinking, and willing. Reid and Dugald Stewart were clearly in error in restricting the functions of consciousness to that of a particular faculty co-ordinate with the other intellectual powers, instead of regarding it, as it manifestly ought to be, as the universal condition of intelligence. The great and fundamental mystery of life, indeed, consists in the relations of consciousness, and of that dynamical agency, or intellectual force, which we call volition, or the will, to the functions of the special senses, and to those of the perceptive and intellectual faculties, which connect man as a sentient, percipient, and thinking being, with his own organisation, and with the world without.

Now, we can best conceive of consciousness in relation to time, not merely as an incalculably rapid succession of acts or states, but as passing through a series of successive developments. *Still one it is, and indivisible;* for the unity of consciousness is the deepest and most indisputable fact in the nature of man; and psychology has accordingly been briefly but aptly defined, "*developed consciousness.*"

There are three phases of consciousness successively developed: the sensational, the perceptive, and the intellectual, marking three distinct stages in our mental progress, however difficult, if not impossible, it may be to determine precisely in time the genesis either of the perceptive or of the intellectual consciousness—at what moment, for instance, the infant eye, ceasing to convey a mere nervous impulse, awakens in the mind its first perceptive glimpses of the sublime and beautiful, or when the ratiocinative and reflecting faculties come first into play. But true it is, that we feel before we can perceive; we perceive and form ideas before we can think; and, long ere we can either reason or reflect, we manifest the animal instincts, and the social propensities, affections, and feelings. Equally true it is, and indisputable, that feeling, perceiving, willing, and thinking—in other words, sensation, perception, and intellection—are different and distinct states or phases of consciousness successively developed, and not to be confounded with each other. Hereafter, as we shall find, they each severally have and require a distinct nervous organic instrumentality of corresponding elaboration and complexity, for the manifestation of their respective phenomena in this life. Nevertheless, self-consciousness, world-consciousness, and intellectual consciousness, are indissolubly connected. They cannot exist without, but only by and through each other; and under these three phases of mental activity or consciousness, the sensational, the perceptive, and the intellectual, all our psychological phenomena of whatever kind are comprised, and may be grouped.

Self-consciousness, as the earliest, is necessarily the lowest phase of mental development; for in it, the mind, at first, exists in a state of bare receptivity. The senses, indeed, come into play from the moment of birth, but the intelligence is purely sensational; the feelings are simply those of pleasure and pain, and the impulses to action are innate and instinctive. The instincts, as the untaught activities of our animal nature, are innate; as subjective feelings, they arise in obedience to certain laws of our nature, or are brought into action in direct respondence to stimuli acting upon the sensational consciousness from without. All our actions are automatic, reflex, consensual, and instinctive, at birth; the infant mind responding solely, at first, to impressions from without, or to instinctive feelings from within.

The sudden light, indeed, may dazzle, and a loud noise may startle; but, until the perceptive consciousness has been awakened, the mind is in a state of isolation; it takes no cognisance of an outward world. And thus we see that the essential phenomena of the sensational consciousness, besides the intuitions of the special senses, are sensori-motor consensual and instinctive feelings and actions. Among the phenomena of the sensational consciousness, common sensibility or feeling, and the capability of receiving pleasure and pain from mere tactile impressions, are primordial—the most universal in Nature and the most essential to human existence. But still strictly consensual are the intuitions of all the special senses, and confined to the sensible phenomena of matter. For we see light, we hear sound, we smell odour, we taste sapor, and we feel pain, heat, and cold; so that it has been truly observed, we have no knowledge of body by any of the senses. What we are conscious of by sense is the sensible phenomenon itself, and not the bodily substance, with which it is connected, either as the proximate cause of the sensation, or as the organ by and through which it is felt; so that the exercise of the senses displays to us five elementary modes of being, logically unconnected with the bodily substance.

But besides the intuitions of the special senses, and the simple elementary feelings of pleasure and pain associated with their functional activity and exercise, we have various subjective sensations, appertaining to the bodily states, both in health and disease. Such are the sensations of the appetites, as in hunger and thirst; and of abnormal conditions of the muscular system, as in cramps, spasms, shudderings, etc. We have painful as well as pleasurable sensations; but pleasure is the natural associate of all the normal actions of life—pain, the exception, acting as a monitor, and revealing to the consciousness the existence of morbid actions and abnormal conditions.

In fine, sensation is the link in the chain of being between the vital and mental forces, connecting together the conscious and the unconscious processes. As a complex act, it lies partly within and partly without the consciousness; but, as soon as embryonic life is passed, it traverses the line which separates the physical and vital from the nervous and mental processes, enters the light of consciousness, and thus becomes a fact, psychological as well as physiological.

Phenomena of the Perceptive Consciousness. We have seen that in sensation the conscious mind is solely absorbed in its own subjective conditions or feelings, as induced by the bodily states; but in perception its attention is transferred from these to their interpretation, as expressive of outwardly existing facts, so that perception implies a consciousness of the object which induced the sensation or impression—a recognition of its cause, as something external to the mind itself—an outward reality; and, thus, while on the one hand, sensation is wholly subjective in relation to knowledge, perception is, on the other, objective. The one is self, and the other is world, consciousness; but they are indissolubly connected, and no sooner has the perceptive consciousness begun to dawn, than greater mental activity is manifested, increasing in intensity and energy as the sphere of its action is widened; arising, not only from the direct conflict of the perceptive faculties with the external world, but also from the development of the will or intellectual force, and from the evolution and play of the individual or personal and social propensities and affections, and of the emotional, moral, and religious intuitions and feelings. For, in the second stage of our mental progress, *ideas* are formed and retained in the mind; for *memory* exists, *volitional power* is developed and exercised, and *emotional sensibility* is awakened and manifested.

Perception, through the inlets of the senses, speaks to us from *without;* and ideation, or the formation of ideas, is effected in response to impressions from without, by virtue of the primeval harmony which subsists between the perceptive faculties of the mind and the external world or Nature. For, in perception, as the correlative of sensation, and indicative of its intellectual phase, sensory impressions are *idealised*—that is, translated or converted into intellectual phenomena, and become the pabulum of thought; and thus we see that, in the progress of mental development, to the sensational the perceptive phenomena are superadded; these are *ideation* and *volition*, with their associates *memory* and *emotional sensibility*. The genesis of the *will* and of the *memory* is in the perceptive consciousness; for their manifestation is dependent solely upon the presence of ideas in the mind. There can, indeed, be no *volitional* or *determinate action*, any more than there can be any exhibition of the power or faculty of *memory*, without the existence and retention of ideas in the mind; and hence ideation, memory, and volition, are interwoven with each other, and are at the root; when, indeed, the perceptive consciousness is in abeyance, they are one and all suspended.

As the inseparable concomitants of memory, in the development of the perceptive consciousness, the phenomena of the associative principle are far too striking and too important to be overlooked. And although the *doctrine of the association of ideas* by the Hartlian school, and especially by the illustrious Priestley, was, to the exclusion of other essential elements of the human mind, carried too far, it nevertheless involves an important principle of great activity and efficiency in our intellectual culture.

The influence of the will on the memory is all important; for, unless the attention of the mind, by an act of the will, be directed and fixed upon an object or event, the *idealised impression* may be so evanescent and transitory that, like the baseless fabric of a dream (in which volition is suspended), it may scarcely leave a trace behind it.

The will, indeed, is a mental element of vast importance; and the power of the mind by the will varying, it is true, in degree in different individuals, and at different times in the same individual, to *determine* and *control* the succession of our mental states, whether of feeling or of thought, is most important, in as much as the intellectual character of every mental process depends upon the manner of succession, and especially on the action of the will in determining the result. It has been well observed, that "the will, or intellectual force, is eminently capable of cultivation by steady intention of mind and habitual exercise; and thus rightly exercised, it becomes one of the highest perfections of our moral and intellectual being. By no quality is one man better distinguished from another *than by the power of his will;* by the mastery acquired over the subject and course of his thoughts; by the power of discerning what is desultory, frivolous, or degrading; and of adhering singly and steadily to those objects which enlarge and invigorate the mind in their pursuit." (Sir H. Holland.)

It is true that the will can *originate* nothing; for it is limited in its power and in the sphere of its action to the *selection* and *intensification* of what is *already* and *actually* before the consciousness. In its evolution, it proceeds *pari passu* with that of the higher faculties of the mind, until they reach their dominant development in the highest reason and the freest will; and then it is that an act of the will, embodying the whole man emphatically, involves intelligence, emotion, impulse.

The perceptive consciousness is not limited in the sphere of its action to the mere cognition or ideation of external existences, their sensible qualities and physical attributes. It has a far more extended range; for, excepting the sensational intuitions, all our immediate or intuitive knowledge, of whatever kind, has its origin in perceptive experience—in the direct conflict of the perceptive faculties of the mind with the external world or Nature. All our ideational activities, appertaining to man as an individual emotional and social, as well as a moral and religious being, are duly evolved and brought into play in the development of the perceptive consciousness; for, *before all teaching*, he has not only an intuitive æsthetic sense of the true, the beautiful, and the good—of sublimity in Nature and of harmony in sound,—but moral intuitions of right and wrong, and religious and emotional of wonder, awe, veneration, and reverence.

Long before he has attained to the utterance of articulate speech—nay, as soon as the perceptive consciousness has begun to dawn, and the power of recognition to be awakened—the child is able intuitively to interpret the tones, gestures, and expressions of emotion, and becomes sympathetically affected by them. In his mind, an intuitive apprehension of right and wrong is attached to certain actions, and evidently precedes any distinct apprehension of the language by which moral truths are conveyed. The blush upon the cheek, and the early sense of shame, come before there have been any trains of thought as to the consequences of misconduct or of crime. In the expressive language of Lord Bacon, "the light of Nature not only shines upon the human mind through the medium of the rational faculty, but by an internal instinct, according to the law of conscience, which is a sparkle of the purity of man's first estate." Equally and alike intuitive are his religious emotional feelings of awe, wonder, veneration, and reverence, early developed, and awakened by objects of sublimity, grandeur, vastness, and mystery.

Moreover, closely associated in the perceptive consciousness, with the propensities and affections, and with the moral and religious intuitions and feelings, are the emotional states. Like them, these are all of a composite nature, involving in their manifestation perceptive or ideational activities, as well as sensorial feelings. There are, indeed, certain elementary emotional sensibilities, readily roused into activity, through all the organs of sense, and which, in the absence of the ideational element, may be said to bear the same relation to the true emotions which the instincts do to the propensities and sentiments, as, for instance, joy and fear, etc.; for such is laughter, the expression of joyous emotion, when a mere consensuous act, provoked by titillation on the surface of the body; and such, too, are the trembling fear and shuddering dread from the lightning's vivid flash, quickly followed by the crash or peal of the loud thunder. But still ideation is the connecting link intermediating between the extremes of mental action, emotion and volition—between our inherent elementary emotional sensibilities and impulses on the one hand, and the operations of thought and volitional power on the other; sometimes, indeed, in subordination to the one, and sometimes the other. For Laughter, holding both her sides, when an emotional act, is excited by ludicrous ideas in the mind.

Now, as sensation is the link in the chain of being between the conscious and unconscious processes, the vital and the mental forces, so is perception intermediate between sensation and intellection—the lowest and the highest phases of consciousness or mental development. The intuitions of the perceptive faculties, being often closely interwoven with feeling, and sometimes, especially in regard to our social and moral relations intensely felt, while on the other hand, they furnish the pabulum of thought. And though feeling has no place in the constitution of abstract ideas, or on the processes of logical reasoning, still we have both pleasurable and painful trains of thought and reflection.

[*To be continued.*]

DOES THE PERICARDIUM BECOME INVARIABLY ADHERENT TO THE HEART AFTER ACUTE PERICARDITIS AND RECOVERY?

By William Hinds, M.D., Professor of Botany at the Queen's College, Birmingham; and Lecturer on Botanical Science at the Birmingham and Midland Institute.

The question is difficult to deal with very positively and conclusively: first, because the cases which die, and in which we find the two surfaces glued together, do not reveal to us the possibility or impossibility of a continuance of life or even an apparent recovery; and secondly, because the recoveries, or "apparent" recoveries, as I shall be able to show, are made by patients who may often live long, and may never again pass into our hands—their histories being thus lost to view, and therefore to science.

The view generally adopted with respect to this question may be stated in the following words of an eminent writer:—

"The to-and-fro or rubbing sound is never of long duration, but soon terminates in one of two ways. Either the patient dies in a short time, the sound continuing to the last; and then the pericardium is found coated with rough lymph, but throughout the far greater part of its extent or altogether *un*adherent. Or the sound ceases, never to return, while the condition of the patient improves, or he even seems to himself and to others to recover his perfect health. In these cases, the sound ceases from a physical impossibility of its continuance; viz., from adhesion of the pericardium over the whole or the greater part of the surface of the heart. And in this category of apparent but unreal recoveries, I cannot doubt that many of Bouillaud's cases of 'pericarditis terminating in health' ought to be included."

With this principle deeply impressed on my mind, I had often been surprised to witness, in many cases which from time to time came under my notice, a recovery with which I now believe, and have a long time believed, that the principle above laid down is not consistent. I will give shortly one or two cases, as examples of the class indicated.

Case. T. S., a gentleman, aged 27, proprietor of a vinegar brewery, was attacked on August 5th, 1857, with rigors and loss of appetite after exposure. He had also severe pain of the neck, and was unable to move his head. Pain across the chest was also complained of, and some cough. He was treated with expectorants and diuretics, and began to improve; and on the 8th, he was in business amongst the casks. In consequence, his symptoms became aggravated. He was seen on the 10th, and complained of severe pain over the cardia and about the chest. He was ordered to bed; and on examination, there was found great tenderness in the precordial region, and especially on pressure upwards beneath the left short ribs. The stethoscope revealed a very loud friction or to-and-fro sound; and in addition, a little *bruit* with the first sound of the heart. The case was treated by local bleeding, calomel and opium, and diuretics.

August 14th. The tenderness was less; the gums were slightly affected by the mercury; and the friction-sound was not quite so rough and loud. The treatment was continued.

August 17th. The tenderness on pressure upwards beneath the ribs was nearly gone. The friction-sound was still less distinct, and the normal sounds of the heart were heard more distinctly. The gums were very tender, and the mercurial fœtor was very perceptible in the breath.

August 18th. All friction-sound had ceased, and a near approach to the natural sounds of the heart existed. The patient was up and walking about the room. He continued to take the calomel; but only to the extent of a grain once daily.

Three days afterwards—namely, on the 21st—he was rapidly gaining strength: and a most careful examination showed the heart's sounds perfectly normal.

In this most useful case, the friction or to-and-fro sound, at first very great, gradually disappeared from day to day, as the case generally improved under the influence of local bleeding and mercury. The patient, seen repeatedly during the last three years, shows not the slightest departure from robust or perfect health; and it is fair to assume that the cure is complete and real. If in this case the heart had been glued to the pericardium, could such a complete and lasting recovery have occurred? Surely not.

In my paper, No. 2, previously published in this Journal, Case iii will be found to exhibit a precisely similar subsidence of the to-and-fro sound. They are types of numbers of cases which occur and must have occurred to many practitioners, and I do not see that it would add any additional weight therefore to multiply similar cases. I will, however, mention one, showing a different termination of the same disease.

Case. A. B., a child, aged about 2 years, was taken ill with violent feverish symptoms, and died after a very few days illness. No heart-disease was detected during life. The symptoms being considered somewhat obscure, a *post mortem* examination was requested. At the autopsy, the heart was found glued to the pericardium throughout its whole surface by a thick toughish layer of recent lymph.

Now, the cases in which the heart is found intimately and closely adherent to the pericardium, if we except those from recent disease, must, I believe, be held to be extremely rare. Do they ever occur? Has any practitioner seen many or any such cases in which the patients, well of the cardiac, have died of any other disease, or even "apparently" well of the cardiac disease and living in apparent health for any considerable period afterwards? But if not, it affords at least negative evidence of the impracticability of even apparent health with an adherent pericardium. I have never myself met with any case of adherent pericardium, except from recent disease; and, even in cases of patients dying of heart-disease of any other type, I have never met with any case of intimate general adhesion of the surfaces. I find a case in Dr. Watson, in which there was adherent pericardium in a patient who died suddenly, just sixteen days after the friction-sound had ceased. This, however, is not even an apparent recovery. A case of some duration also died lately under my own care, in which there was enormous distension of the cellular tissue and effusion into the cavities; and in which, on a *post mortem* examination, some few shreddy fibrous bands, of one to two inches long, passed between the surfaces. Such cases, however, do not at all affect the principle suggested.

The white patches and spots often seen on the surface of the heart, and to which my attention was first directed by the observations of Dr. Williams, late of University College Hospital, made in the course of *post mortem* examinations, were considered by him as the remains of circumscribed partial inflammations affecting at least the serous covering. If such were their origin, it is not improbable that even these partial inflammations would give rise to the peculiar friction-sounds so long as any roughness remained; such sounds ceasing on the absorption of lymph being complete. The origin of these patches, however, does not affect the general question.

The facts and considerations adduced, point to two just conclusions: *first*, that there is no conclusive evidence to show that an adherent pericardium is consistent with the continuance for any considerable period of life, or of apparent recovery of the healthy state; and *secondly*, that pericarditis, with exudation of lymph on the surfaces, is a curable disease, and that in a strict and just sense of the term.

Reviews and Notices.

The Natural History Review: a Quarterly Journal of Biological Science. No. i. London: Williams and Norgate. 1861.

There is perhaps nothing more indicative of the low ebb of natural science in England, than the limited circulation of all journals and books devoted to its advancement. Mix it up with a little "Cockney chaff", and it is wonderful how it goes down, from animated descriptions of whirling atoms, up to the habits and instincts of man himself. Just in proportion to the difficulty of getting a sale, is apparently the difficulty of finding any single man who will undertake the editorship of a scientific journal. In this last new venture, no fewer than eleven editors are advertised; and as, at the present day, we could hardly expect for a scientific journal a large number of readers or contributors, it would look as though each contributor was his own editor and reader. It is, however, a fact much to be regretted, that there are so few persons who pursue science for its own sake; and that, unless science take some practical direction, there is no one to listen to its claims. There is, to be sure, just now a little agitation on the surface of society about Mr. Darwin's new book *On the Origin of Species:* and perhaps we are indebted to this work for the starting of the new journal, as we find that those who have undertaken the duties of editorship are among the acknowledged supporters of the new theory. The contents of the first number would also seem to indicate that the new editors intend to do battle against ancient prejudices in more directions than one.

The most remarkable paper is one by Professor Huxley, on the Zoological Relations of Man with the Lower Animals. Those of our readers who have followed Professor Huxley's literary career (and few who have cultivated biological science will be unacquainted with his writings) will have remarked that many of his zoological and physiological views are in opposition to those of Professor Owen. The young professor has no fear nor scruples in attacking the great scientific "lion" of his day. His pursuit of science has not, it would seem, led him in the same path as the great British palæontologist. The subject of Mr. Huxley's paper is one of great interest; and, although often discussed independently of any theory of the origin of species, it has gained attention on account of its introduction into the arguments for and against Mr. Darwin's theory. On the occasion of the discussion of this subject at the meeting of the British Association at Oxford, Professor Owen, in objecting to Mr. Darwin's views, stated that the differences between man and the highest quadrumana were so great as to render it unreasonable to suppose that, by any hypothesis of natural selection, he could have been the offspring of a species of monkey. He added, that the difference between the brain of man and that of the gorilla was greater than between the brains of the gorilla and the lowest quadrumana. On this statement Mr. Huxley joined issue with Professor Owen, stating that the differences in the structure of the brains of man and of the gorilla were not greater than between allied species; that they were not so great as between the brains of the gorilla and the lower quadrumana; and that he saw no reason why the gorilla should not at one time have been father to the man, and that he should feel it no degradation to be obliged to acknowledge a fine old gorilla for his grandfather. *De gustibus non disputandum.* We shall therefore leave Professor Huxley's sentimentality, and refer to his scientific views. In opposition to Professor Owen, he maintains—

1. That the third lobe of the brain is neither peculiar to nor characteristic of man, seeing that it exists in all the higher quadrumana.
2. That the posterior cornu of the lateral ventricle, as maintained by Professor Owen, is neither peculiar to nor characteristic of man, inasmuch as it also exists in the higher quadrumana.
3. That the hippocampus minor is neither, as asserted by Professor Owen, peculiar to nor characteristic of man, as it is found in certain of the higher quadrumana.

We shall not, however, follow Professor Huxley in his argument, but merely remark that it is quite possible for him to substantiate his positions to his own satisfaction, and yet for Professor Owen to be perfectly correct in his statement and his deductions therefrom. The point of the argument at Oxford was the relative difference between man and the gorilla as species. The difference between the structure of their brains is only one of fifty points of difference; and, even admitting that Professor Huxley had demonstrated in the most satisfactory manner the erroneousness of Professor Owen's views, the differences between man and the gorilla or the orang otan would still be sufficient to give force and weight to Professor Owen's arguments against the Darwinian hypothesis. We would be the last to bring forward authority or opinion as against the clear evidences or deductions of scientific investigation; but we cannot but feel that a zest has been given to the advocacy of Darwin's theory, because it is opposed to the convictions of mankind in general, and might be turned against the doctrines of the Christian religion in particular. There is something captivating in the idea of being able to show that the great mass of men are entirely wrong. The searcher after truth, however, cannot sympathise with such an idea, unless it be founded on some kind of irrefragable evidence. Where clear evidence is wanting, he cannot sympathise with its promulgators, however much their activity may lead to the investigation of facts and the advancement of our knowledge. It seems taken for granted by some men, that no scientific hypothesis, however vague, is to be condemned or opposed by any argument derived from the study of Nature or the contents of the Bible. But surely the evidence on which the Bible is received as a book of authority is worth something; and, when two hypotheses are equally balanced, that evidence should be taken into account when it can be fairly used as an argument. Every one professing a belief in the Christian religion, resting on satisfactory evidence of its truth, must allow that evidence to influence his reception or rejection of such hypotheses as those of the author of the *Vestiges of the Natural History of Creation*, or of the doctrine of the origin of species by natural selection. The denial of the possibility of the creation of species, and the necessary consequence of accepting the theory of the evolution of the responsible creature man from the irresponsible brutes, is, every one must see, incompatible with the belief in miraculous agency and the relations and destiny of man, as revealed in the Bible. We again repeat, that we would not import into the investigation of facts any opinion formed from an interpretation of particular passages or parts of the Bible; but when we are asked to take up an hypothesis as a method of investigation, which takes for granted that the basis of our Christian life is untrue, we say that the danger of such an hypothesis in misleading the mind on moral and religious subjects is so great that we reject it, however otherwise well it may be adapted to advance scientific investigation. We are glad to know that, even on scientific grounds, Mr. Darwin's hypothesis is not preferred by some of the ablest naturalists of the present day. Professor Owen and Professor Phillips have at least given it their emphatic condemnation. Professor Huxley himself, in his lecture at the Royal Institution, dare only ask for it a fair hearing; whilst those who sanction it as a scientific theory are amongst the personal friends of its amiable author, and whose affections rather than their judgment would explain their advocacy of its claims to scientific confidence.

Practical Observations on the Diseases of the Joints, involving Anchylosis, and on the Treatment for the Restoration of Motion. By Bernard E. Brodhurst, F.R.C.S., Assistant-Surgeon to the Royal Orthopædic Hospital, etc. Third edition. Pp. 120. 1861.

We cordially congratulate Mr. Brodhurst upon his success in a field of surgery which he has made entirely his own, by the patient and zealous application of the sound principles of British surgery to a class of cases, which, before he wrote, were either altogether neglected, or barbarously treated. We are not so ignorant of the history of the treatment of anchylosis as to claim for Mr. Brodhurst originality in all that he writes; but he deserves the highest praise for the different modifications he has suggested, and for the admirable precautions which he lays down for the various stages of his treatment. We have witnessed the most successful results follow a faithful attention to his rules, and, what is still stronger evidence in their favour, we have seen the most lamentable issues from a careless disregard of them, prompted by a desire to do too much at once. Mr. Brodhurst first published his experience in seven cases; his second edition detailed the history of thirty-two cases; and he now gives us a third edition with an accumulated evidence of the correctness of his views in a history of 114 most successful cases.

Copper Vessels and Preserved Fruits. The prefect of police in Paris has issued an *ordonnance*, forbidding the use of copper vessels, or of salts of this metal, in the manufacture of preserved fruits and legumes. Offenders will be prosecuted before the competent tribunal. The sub-prefects, mayors, chiefs of police, and other officers are charged with the due execution of the order.

DR. BROWN-SÉQUARD'S
GULSTONIAN LECTURES
ON THE
DIAGNOSTIC VALUE AND MODES OF PRODUCTION OF THE VARIOUS SYMPTOMS OF DISEASES OF THE BRAIN.
DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY, 1861.

In commencing the fifth lecture, which was delivered on February 20th, Dr. Brown-Séquard stated his intention of describing the symptoms attending disease of the parts at the base of the encephalon; referring especially to those parts where the symptoms of injury or disease are best marked.

The medulla oblongata contains several parts having connection with the brain, but of which the precise functions are not understood. Through the *anterior pyramids*, however, the dictates of the will are transmitted to the muscles; and, from the small size of these structures of the medulla, Foville, Longet, and other physiologists have thought it impossible that they can be the channels of voluntary motor imfluence. They have also taught that the decussation which exists in the middle line, entering from the upper part of the pons Varolii underneath the tubercula quadrigemina, is a decussation of motor fibres. The lecturer, however, had already given reasons in opposition to this view. First, this decussation is said to be of the fibres of the anterior columns of the cord; but the anterior columns of the cord, in the cervical region, do not convey motor fibres. It is the lateral columns which perform this function; and these lateral columns are continuous with the anterior pyramids, and do not receive decussating fibres from the anterior columns. In pathology, we find that neither injury of the anterior columns nor of the olivary bodies, through which the anterior columns are continued, produces paralysis; while the anterior pyramids cannot be injured without the production of paralysis in a degree corresponding with the extent of the lesion. Further, injury of one half of the medulla oblongata (destroying the anterior pyramid and the olivary body) gives rise to paralysis of the other side of the body; whereas, if the olivary body contained motor fibres, there should be paralysis of the same side—the decussation having not yet taken place. Again, if we admit that the fibres decussating in the upper part of the pons are voluntary motor fibres, then, in cases of injury of one crus cerebri, of half the pons, and half the medulla, above the decussation of the pyramids, there should be paralysis of both sides—which is not the case.

The *olivary bodies* do not convey voluntary motor fibres; what, then, is their function? The lecturer could not enter fully into this subject; but he observed that the study of these parts is likely to open the field for an explanation of many interesting phenomena. The olivary body is composed of parts having peculiar properties. When a nerve is divided, the first result is contraction of the muscle to which it is supplied; and then the contraction ceases. The motor fibres have here been called into action by irritation; and their action has continued as long as the irritation has been applied, and no longer. But if the olivary body be irritated in an animal, muscular motion is produced; and this motion is permanent, often continuing during the life of the animal. The same fact has been observed in some cases of injury of the olivary body in man. It has been noticed that, in cases of rotatory movement, there is a spasm of certain muscles, especially of the neck. This has been supposed to depend on the influence of the mind; but the same thing occurs after the removal of the brain. But even the most limited irritation of the olivary body produces great irritation, influencing many muscles, and sometimes producing severe spasms. There must, then, be some other cause of this muscular action than direct communication from the olivary body to the muscles, which we cannot suppose to be so generally supplied with nerve-fibres from so limited a portion as that which is irritated.

Irritation of the pons Varolii and medulla oblongata produce rotatory movements. These, then, must be looked on as symptoms of injury of the parts referred to.

With regard to the manner in which the symptoms are influenced by the locality of the lesion in regard to the place of decussation of the fibres, Dr. Brown-Séquard would mention a few facts derived from clinical observation, and from experiments.

The decussation of the anterior pyramids takes place at the lower part of the medulla oblongata; the locality of paralysis, then, in injury of the medulla, is determined by the seat of the injury in relation to the point of decussation. If the medulla be injured on one side above the decussation, then the result is paralysis of motion and of sensation of the opposite side of the body. If the injury take place below the decussation, there is paralysis of motion on the same side of the body with the injury, and loss of sensation on the other side. Injury at the level of the decussation of the pyramids, affecting the whole of one side of the medulla, generally produces death at once; some instances, however, have been met with in which there was paralysis of motion in both upper limbs, and of sensation on the side of the body opposite to the injury. In all these cases, and, indeed, always in injury of one lateral half of the cerebro-spinal axis, the loss of sensation is found to be on the other side of the body.

It is a remarkable physiological fact, that sudden irritation of the medulla oblongata often produces arrest of the heart's action. Flourens has imagined that his experiments show that death is here produced by injury of a particular point, which he terms the *nœud vital*, or vital knot, and which he therefore regards as the focus of life. But if this part be extirpated after the division of the *par vagum*, so that no action on the heart can be produced, then the effect in suddenly arresting life is not perceived. Besides, any irritation whatever, even indirect, may stop the action of the heart. When the action of the heart is thus arrested, it may be restored by simple pressure on the organ. This may be useful in syncope, or in those cases of chloroform poisoning in which the circulation is primarily acted on.

Schrœder van der Kolk has observed an important fact in relation to the olivary bodies: namely, the loss or impairment of speech when these bodies are injured or altered in structure. Here, then, we find, in one instance at least, a central organ regulating the action of a certain series of coordinated muscles. The fact is of some diagnostic value; at the same time, we know that the voice and speech may be diminished in consequence of injuries existing elsewhere—probably as the result of a reflex irritation.

Injuries of the medulla oblongata and pons Varolii almost always produce impairment of deglutition; and in injury of the pons, this impairment mostly occurs in proportion to the extent of the injury. There is then something more than mere injury of the nerve; probably the nerve-cells which receive the terminations of the nerves presiding over deglutition communicate with the cells of the pons, and the seat of coordination of the movements of swallowing is in this part of the encephalon.

Hearing is sometimes, in injury of one of the crura cerebri, lost on the same side. This can scarcely be explained otherwise than as a reflex phenomenon; for the auditory nerves decussate in the medulla. Sometimes, on the other hand, there is no diminution of hearing, even though half the pons and one crus cerebri be injured. How then does the mind remain in connection with both ears? Dr. Brown-Sèquard thought there may be some arrangement of the kind which Schrœder van der Kolk believes to exist with regard to deglutition—that the extremities of the two nerves are connected with each other by means of fibres, so that the uninjured side of the encephalon remains in communication with the auditory nerves of both sides.

Hæmorrhage in the medulla oblongata, when extensive, produces rapid death; when it is limited, it gives rise to spasmodic contractions. When hæmorrhage takes place into the pons Varolii, the event is signalised by stertorous breathing; there are also, very frequently, general paralysis of motion, and convulsions. The hæmorrhage in this part is not always fatal; the lecturer had seen a man who, thirteen years ago, had presented the symptoms of this occurrence, in the form of paralysis affecting the whole body except the respiratory muscles, but who was now so far recovered as to have only paraplegia left.

In many cases, an injury of the pons produces loss of the functions of all the five senses. This takes place when the trigeminal nerve is irritated just at the point of its exit from the pons. Ulceration of the cornea and sloughing of the eye are also not uncommon in injury of the pons Varolii.

Dr. Brown-Sèquard had found the measure of sensibility in the face, as determined by the compasses, important in determining the presence and seat of lesion of the pons Varolii. In one case, for instance, there was constant spasm of one side of the face; the eyelids were a little closed; the eye was red; the pupil was somewhat contracted; and the sensibility on the same side of the face was diminished. In another instance, again, with the same symptoms affecting motion, the sensibility was impaired on both sides; and here the injury must have been at the level of the decussation of the fibres of the fifth pair of nerves.

There are cases in which it is difficult to determine in which side paralysis of the face exists, in consequence of the presence of convulsions. In a case, for instance, of hæmorrhage into the right half of the pons, there may apparently be paralysis of the same side, the face being drawn, by the convulsive movements, to the opposite side; but, if the face be drawn by the hand into its proper position, the muscles of the side supposed to be paralysed will be found to be still capable of performing their functions.

Anæsthesia has been found to exist in one limb or in half of the body, or in a few cases in the whole body, in cases of injury or disease of certain parts of the brain. In two cases of injury of a small portion of the cortical substance, there was anæsthesia of the opposite half of the body; and, on the other hand, the same amount and kind of injury is very often unattended by anæsthesia. In two other cases where the disease affected the whole of the grey matter, there was loss of sensation on one side only. Dr. Brown-Sèquard had also found anæsthesia of the opposite side present in inflammation of the anterior lobe (2 cases); of the middle lobe (6 cases); of the posterior lobe (4 cases); of the corpus striatum (3 cases); of the optic thalamus (2 cases); of the central parts of the brain (2 cases); and of the crus cerebri (2 cases). In these instances he had been careful to select only cases of simple inflammation without effusion; in order to avoid the objection that the loss of sensation might have been caused by the pressure of effusion. The loss of sensation, then, did not result from pressure; and it would be absurd to suppose that each of the parts affected was the centre of sensation in the respective cases. We must admit some peculiar cause, common to all; and probably this was a reflex influence. It may be said, however, that there was some undetected injury. It may have been so in some instances; but it is impossible to admit this as a general proposition, when we consider the number of cases in which the phenomenon referred to has been observed. This argument, then, does not militate against the hypothesis of the loss of sensation having arisen from reflex influence. Further, we find anæsthesia produced in injuries of distant parts of the body.

Why is the structural alteration in the part of the encephalon which is the seat of the anæsthesia not found after death? Because the diminution in the amount of blood supplied to the part, although sufficient to produce anæsthesia, may not be so considerable as to leave traces of its existence.

It may be objected, Dr. Brown-Sèquard observed, that the views which he brought forward are all hypothetical. He willingly allowed this; and that his hypotheses have no direct facts in their favour. But then they are in harmony, as far as appears, with known facts; and it is right to make use of hypothesis as means of ascertaining other facts, retaining it so long as it is in conformity with all that is observed, but throwing it aside as soon as a single fact appears which is not reconcilable with it.

A Prolific Philosopher. A French *savant*, named Tiraqueau, is said to have given every year a child to his family and a book to the public. He had thirty children, was a native of Poitou, and one of the greatest men of his time.

British Medical Journal.

SATURDAY, MARCH 16th, 1861.

GLAUCOMA AND IRIDECTOMY.

The operation of iridectomy in acute glaucoma has now been before the profession for about six years. It has been largely practised; and, by those who have avowedly abstained from trying it, energetic attempts have been made to detract from its merits. The great facts, however, remain, that acute glaucoma does not unfrequently occur; that it is irremediable by constitutional treatment; and that the excision of a portion of iris, if performed within a few days of the outbreak, is effectual in restoring vision and putting an end to the disease. To the first two of these propositions all experience bears testimony. Respecting the third, when surgeons of the authority which Mr. Bowman, Mr. Dixon, Mr. Critchett, and Mr. Hulke, must be allowed to possess in such a matter, unite in one strong and unequivocal statement, it is no longer possible to be incredulous. Indeed, the facts are before us, and we may now judge for ourselves. Cases attested by the names of the surgeons we have mentioned are now on record, which, if clinical evidence can be allowed the slightest weight, prove that this operation, whatever may be the true theory of its action, possesses a really marvellous power in controlling the progress of certain morbid changes otherwise destined to result in permanent blindness. If we may trust these facts, Von Gräfe's discovery ranks second only in ophthalmic beneficence to that of the operation for cataract.

Let us ask especial attention to a case recently under Mr. Dixon's care at the Moorfields Hospital (see p. 272). Mr. Dixon's reputation as a sound and most cautious surgeon is well known. He was not one of those who early adopted this new operation; he even published certain warnings against its too indiscriminate performance. Being, therefore, no partisan, his facts possess especial value. In the case we refer to, the disease was well characterised, and had existed for nearly a fortnight. The woman was so far blind with the affected eye that she could only see a hand moving before it, and could not count fingers. The surface of her cornea was so uneven that no images were reflected with clearness; and such was the effect of the intraocular pressure, that it was impossible to light up the fundus with the ophthalmoscope. Thus the sign of cupping of the optic entrance could not be used, the case being too advanced in its stage. In this condition of things, Mr. Dixon excised a portion of iris. All pain in the globe ceased after the operation. On the next day, the woman could easily see ordinary objects. On the third, the brilliancy of her cornea was restored, and she could read large print. At a week's end, she could read common type with an eye with which previously she could not discern fingers. Subsequently the same disease attacked the other eye. Iridectomy was performed in it also, and with an equally good result.

The case, wonderful as it is, coincides so exactly with fifty others published by different observers, that there is no room for fallacy. It is no longer a matter in which the conscientious surgeon can decline to act. If he operate, his patients will regain their sight; if not, they will go blind. To dissuade a patient with well characterised glaucoma, *in an acute stage*, from having a portion of iris excised, will, if we mistake not, soon become as legitimate a ground for an action for malpraxis as to leave a dislocated hip unreduced.

It must be remembered—and it is for this reason that we wish especially to press the subject upon the attention of all our readers—that acute glaucoma is a condition which will not wait. If the proper time is not seized, it passes by for ever. In this respect, it is more urgent than any form of dislocation, and in fact closely resembles strangulated hernia. There are a few operations which, being usually required at an emergency, it is considered that every surgeon ought to be able to perform at a moment's notice. Amongst these, tracheotomy and the operation for hernia have hitherto been the chief. Operations on the eye have been regarded as a speciality, and as requiring special practice for their successful performance. In iridectomy we have, however, an exception to this. Von Gräfe, in his third memoir on this subject, has very properly insisted that the surgeon in a remote country district ought to feel himself as much bound to be able to perform iridectomy when requisite, as he would to practise tracheotomy off-hand if a patient were in danger of laryngeal occlusion. The operation is in itself not a difficult one, and the delay of a few days may be of the utmost consequence.

There are some interesting facts in the history of the progress of this new operation into general adoption. It suffered temporarily, as many other important novelties have done, through the honesty of its advocates. Having discovered its extreme value in acute cases, Mr. Bowman and Mr. Critchett, who were the first to employ it in this country, felt bound also to give to numerous other cases, otherwise hopeless, the chance which it might possibly afford. It seemed cruel to refuse to do it because only a half-success, or perhaps still less, was all that the most sanguine could hope for. Hence its performance in many cases which from the first were almost hopeless. All these were scrupulously recorded by Dr. Bader in the *Ophthalmic Hospital Reports,* and supplied materials for attacks upon the operation itself from the indiscriminating and prejudiced. Just so did the operation of trephining in cases of cranial fracture with depression fall for a time into great disfavour. It was performed in all severe cases, and of course a large majority of the patients died, much as they would have died had they been let alone. All the cases were lumped together, and it then appeared that not one in ten of our trephined cases resulted in recovery; *ergo*, trephining was a bad operation, and to be disused. After not a few lives have been sacrificed to this miserable logic, the trephine is now regaining the legitimate confidence of surgeons. Had our iridectomists selected their cases for operation, or had they published only their very successful ones (*i.e.*, those done in the acute stage), their triumph would have been much sooner and more loudly hailed. We need not remark, however, that the true interests of science would not have been served nearly so efficiently as they have been by the manly course which was pursued.

HOMŒOPATHY IN THE ARMY.

We are glad to find that the remonstrances of the Militia Medical Staff in Guernsey, and of the medical press, have not been without effect. Dr. Ozanne, the homœopath, so highly esteemed by General Slade, is to be attached to head quarters, and, consequently, his name erased from the muster-roll of the militia, and from the *Army List*. The medical staff, however, is not to be reconstituted; and therefore the injury inflicted on the service still remains unredressed.

We have more than once referred to this Guernsey affair; and have done so because we consider it one of very great importance. No profession should know better than ours the importance of the axiom, *principiis obsta;* and we believe that in this particular case it is the duty of the profession to declare to all concerned that it will allow no tricks of this kind to be played in any of our public bodies. The introduction of an homœopath into the army is not only an insult to the army medical officers, but it is an insult to the whole profession, and injurious to the public service. The reasons why such a proceeding is utterly wrong are so clear and manifest, that we firmly believe Horse Guards authority would not venture to back it, even though the bowels of every gallant individual in the War Office were regulated by the globulists' method.

Let us briefly argue the case. In the first place, no medical man can honourably meet a homœopath in consultation; there can be no medical communion between the two—*i.e.*, so long as we have any respect for ourselves, our profession, and the oath of Hippocrates. This fact, when we consider the consequences which must result from it, of itself condemns such an appointment. Then, be it remembered, the medical corporate bodies of the country—universities, colleges, and halls—unanimously and utterly repudiate and condemn the homœopath and his practice; and, as far they can do so, reject him from their folds. And it is from these very bodies, thus minded, that the army authorities require certificates of competency at the hands of their medical men. The homœopath who holds a diploma of any of these bodies, either obtained it originally under false pretences—dishonourably; or, becoming an honest convert to the lucrative farce, after the obtaining of his medical license, he now holds, as his legal right to practise, the certificate of a body whose principles he has forsaken. No man of military honour or common sense would, we are sure, with these facts fully before him, attempt the introduction of such a manifest element of discord into the medical service of the army. And then, again, let the man who would thrust these homœopaths into the company of medical men, well consider what the number of them is, and what credentials they have to entitle them to such an honour. We need hardly say that the number of these irregulars, when compared to that of medical men, is as contemptible as their so-called doctrines. And as for their personal pretensions, who are they? What have they done for science? Is there one single one of them who (as homœopath) has ever driven a nail into the great ark of science? Is there one of them known in any field of scientific research? We know not the man. Happy fatality, we may say, this dark night which ever hangs like a blight over quackery in every one of its multiform guises. These, we think, are reasons which must satisfy every man of business that it is worse than an absurdity to attempt to thrust a homœopath into any of our public services; and they are reasons quite independent of a consideration of the truth or untruth of the doctrines of the immortal Hahnemann—nobly-visaged, as we behold him in the chemist's shop, like an enormous Jupiter Olympus, ruling it amongst the facetious minutiæ and infinitesimals so skilfully displayed around him.

THE WEEK.

At Leicester and at Winchester, professional procuresses of abortion have been convicted and sentenced for exercising their infamous trade. In the one case, the pregnant woman recovered after miscarriage. In the other, the female died from peritonitis, the consequence of the injury inflicted on her. In this fatal case, the prisoner was sentenced to death for murder. In the former, there were three persons implicated, two women and a man; the women were sentenced to six months' imprisonment, and the man to seven years' penal servitude.

The trial of Mr. Mitchell, a retired naval surgeon, living at Henley-on-Thames, for the manslaughter of his servant, has ended in his acquittal. Our readers must remember well the particulars of this case. We refer to it, because it illustrates a defect in our criminal law procedures which is continually presenting itself; namely, the want of a duly qualified *expert* to take charge of the examination of the anatomical and chemical facts which present themselves in cases of this kind. We are certainly saying nothing derogatory to the members of the profession at large when we state the fact, that it requires an amount of anatomical skill and experience to make a satisfactory *post mortem* examination, greater than that which naturally falls to the lot of most of us. Men must be specially educated for the business, if they are to perform it in a satisfactory way. All of us study chemistry at one period of our lives; but few medical men would, we suppose, presume to undertake the chemical analysis of the parts of the body of an individual supposed to be poisoned. In our view of the case, just as special a knowledge is required for the anatomical as for the chemical consideration of the body.

The French Academy of Medicine is about to undertake a very difficult work—the discussion of the responsibility attaching to the commission of certain criminal acts; whether criminals, in fact, are not persons suffering from disease. A French journalist speaks thus of the work cut out:—

> "Grand and solemn questions, well worthy of the Academy, which, by the depth and universality of its knowledge, should hold the first rank amongst learned bodies! Never, perhaps, was a more important problem offered for solution. Thus, it is that by medical science morality must be established, by medicine the law created, by medicine an equitable judgment pronounced on human actions. The business of the Academy increases in importance and in dignity. The fact is worthy of remark. Its influence on the profession is extended in a like measure, and each day verifies the prophetic intuition of Descartes: 'If there be a method whereby humanity may be perfected, the secret must be sought in medicine.'"

The Library of the College of Surgeons has just received a very valuable acquisition to its treasures, by the donation from Sir C. G. Young, Garter King-at-Arms, of the large and interesting collection of portraits of medical men and naturalists formed by his late brother, Dr. James Forbes Young, of Kennington. It may not, perhaps, be generally known that the nucleus of the collection in the possession of the College was formed by Mr. Fauntleroy, the banker, of Berners Street, who was hanged for forgery many years ago at the Old Bailey. The collection was given by Fauntleroy to Mr. Wadd, of facetious memory, a member of the Council of the College, by whom it was greatly increased. At this gentleman's death, Dr. Merriman and others had the "pickings," when the College purchased it of Mrs. Wadd. On the death of Dr. Merriman, Mr. Stone, the then librarian of the College, became the purchaser, at the sale of his effects, of a large number of choice engravings for his own private collection of portraits and autographs.

Steel, according to M. Trousseau (*le Roi des Médecins*, as M. Bouillaud calls him), is never to be given to a chlorotic patient, who has any tubercular tendency, or who is suffering from tubercular disease. Our readers would guess a long time before they discovered his reasons for the practice. Steel is, according to his theory, as a medicine, prejudicial in the tuberculous diathesis; and besides it tends to cure the neurosis which attends chlorosis, and this said neurosis seems to retard the progress of tubercle, and to be, in fact, antagonistic to tubercle. It is well to remember that a few months ago M. Trousseau denied the existence of such a thing as a pleuritic friction-sound! Knowledge seems sometimes to be like fire—a bad master as well as an excellent servant.

In Dr. John Barclay's pamphlet on *Ale, Spirits, etc.*, we find a statement about which we are curious to have a little more information. At hydropathic establishments, he says, suicides are numerous; and he accounts for the fact by supposing that the water-drinking washes away the nervous matter too rapidly. What we should be glad to learn, is the proof of the fact stated. It is to us quite new, and we must confess sounds strange. At all events, if true, it ought to be more widely known.

An important memoir lately communicated to the Biological Society of Paris, by M. Constantine Paul, shews the deleterious influence exercised on the fœtus in utero, in cases where the mothers have been employed in working in lead. M. Paul has met with thirty-one women who had become pregnant while exposed to the action of this metal. Among these, there were 141 pregnancies; in 82 of which, abortion occurred; in 4 there was premature labour; 5 children were born dead; 20 children died within the first year; 8 within the second year; 7 within the third year; and 1 at a later period: while 14 children still remained alive, of whom 10 had passed beyond the third year. In one instance, a woman had, before her employment in lead-works, a child, who has lived to the age of 30; but, after commencing to work in a type-foundry, she had seven pregnancies, in the first six of which abortion took place at about the fourth month, while in the seventh, which occurred while she had left the foundry for a year, the child was born at full term, but lived only eleven months.

The Court of Chancery has given one of our richest London hospitals a great opportunity. A railroad requires for its terminus a part of the site whereon stand the ancient and modern buildings called St. Thomas's Hospital. But the railroad requires only a part. The Vice-Chancellor, however, to the directors' sorrow, decides that this kind of establishment admits of no halving; and therefore that the railroad must take the whole. These were his words: "An injunction must be granted to restrain the company from taking proceedings compulsorily to acquire the portion of the hospital (comprised in their notice) alone, without purchasing the whole of the property; the plaintiffs being willing and undertaking to sell and convey the whole of their hospital, of which the aforesaid portion formed a part." And the price to be paid for the hospital is £750,000! Such a sum of money as this, carefully disposed of in the purchase of a suburban site, would enable the hospital to double the present amount of relief which it gives to sick humanity. We should imagine that, in this particular case, it would be difficult to suggest one single valid reason for the retention of the hospital in the salubrious environs of the Borough and of the Father Thames at London Bridge. Guy's Hospital, we need hardly say, can provide amply for all the casualties, accidents, and sudden illnesses which occur in that crowded district. But for all those ordinary cases—the ninety out of every hundred—what are more to be desired than those very things which the City can never supply—pure air, an unclouded sun, and the possibility of an agreeable promenade *sub divo* or *tegmine fagi?* Will this great occasion be lost?

The *Medizinische Wochenschrift* speaks as follows of the sanitary state of Vienna:—

> "We have little and bad water, stinking canals, and bye-places. We are at one time stifled with dust, and another covered with filth, and if in winter we are freed from both, we slip about on ice to the danger of arms and legs. We pay dearly for bad food, and our markets are ill-supplied. Thousands of the people are collected in damp dwellings, in cellars, and in garrets. We are giving charity from the beginning of the year to the end, and yet the poor die by thousands. We have hospitals and almshouses, and yet have not, frequently, room for our sick. We do not permit prostitution, and yet it meets us at every corner of the street, and the syphilitic wards of our hospitals are overflowing."

M. Pasteur has, through M. Dumas, communicated a fact to the Academy of Sciences, which, if confirmed, is pregnant with future revelations. M. Pasteur has already shown that the changes which take place in fermenting liquids depend solely upon the presence of vegetable germs or spores; and that each kind of fermentation has its own peculiar generative germ; that there is one for the lactic, another for the alcoholic, and so on. M. Pasteur now asserts that the germ which provokes the butyric fermentation is of an animal nature—a vibrio, or infusorial animalculæ. And this animal will not live in oxygen, but grows and developes well in carbonic acid. It derives its oxygen, not from the air, but from the organic matters which it decomposes. Perhaps, out of this fact, if fact it be, may one day come an explanation of the metamorphic processes going on in the body.

Association Intelligence.

COMMITTEE OF COUNCIL.

The Committee of Council will meet in Birmingham on Monday, the 18th instant, at One o'clock.

Principal Business.—Financial Report; Arrangements for Annual Meeting; Management of the Journal.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 5th, 1861.

SOUTH-EASTERN BRANCH:

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

The third and last meeting for the present session will be held at the Sun Hotel, Chatham, on Friday, March 22nd, at 3.15.

Dinner (punctually at 5.30 P.M.) will be prepared for those who may be able to remain.

Trains will leave for London and all stations on the North Kent Line at 8.0 P.M.; for Maidstone at 8.35; and for Rainham, Sittingbourne, and Canterbury, at 7.47.

Gentlemen intending to dine, are requested to give an intimation thereof on or before Wednesday, March 20th, to Mr. Fry, of Maidstone; or to

James Dulvey, *Honorary Secretary.*

Brompton, Chatham, March 7th, 1861.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

An ordinary meeting of the Bath and Bristol-Branch of the British Medical Association was held at the White Lion Hotel, Broad Street, Bristol, on Feb. 28th, 1861; J. Soden, Esq., President, in the chair. There were also present, thirty-six members and seven visitors.

The late G. Norman, Esq. The President said that although the annual meeting would be the proper occasion for paying a fitting tribute of respect to the memory of their lately departed friend and associate, Mr. George Norman, yet he could not allow the present and first occasion of meeting since the sad event to pass without calling upon the members to sympathise in deep and sincere regret at the loss of so eminent and distinguished a member of the profession.

New Members. The following gentlemen were proposed, balloted for, and elected members of this Branch:—William W. Day, Esq. (Long Ashton); Geoffrey V. Cooper, Esq. (Royal Infirmary, Bristol); and Henry Grace, Esq. (Kingswood Hill).

Papers and Communications. The following papers were read:—

1. Life Assurance Societies and Suicide. By J. G. Davey, M.D. [An abstract has been received for publication.]
2. Case of Arm-Presentation with Exomphalos. By J. G. Swayne, M.D.
3. Aneurism of the Popliteal Artery Treated Successfully by Flexion. By A. Prichard, Esq. [The papers of Dr. Swayne and Mr. Prichard have been received.]

Dr. Herapath exhibited some "Hepatine," a substance recently discovered by Dr. Pavy, commented upon some of its properties, and described its behaviour with various tests.

Special Correspondence.

DUBLIN.

[FROM OUR OWN CORRESPONDENT.]

To those who appreciate and respect the British Medical Association, it is no small gratification in these times, so prolific of medical publications, to behold the Journal, reputed and acknowledged as the exponent of the views of that honourable society, assume, as it deserves, the front rank in the professional literature of the day. With the experience of its improvement since the commencement of the present year, we consider it needless to vaunt our hopes in its future or to enter into any detailed recognition of its novel merits. Among many recent enhancements of its value probably there is none more important than the introduction of a "Special Correspondence." Thus the Journal becomes a cosmopolite, and wisely avails itself of means whereby the representatives of the profession in places near and distant may become intimately acquainted; the philosophy of its advancement as well as the obstacles thereunto fully understood; its interests common; its members united; its science and benefits diffused; and its prospects matured and forwarded. However brilliant or comparatively obscure each individual School may know itself to be; whether in Paris, London, Vienna, Dublin, Berlin, or elsewhere, it becomes united in spirit, through this system of "Special Correspondence," with its fellow-labourers in the field of knowledge, and thus gains strength and emulation from the works of others. The encouragement which this feeling brings, induces us, on the present occasion, to offer a sketch of the medical world in Dublin.

Taking into consideration the size and population of Dublin we find its medical institutions beyond expectation ample and numerous; bearing proportion to the notoriously large class of students of medicine by which the city is frequented. The average number constituting this class varies from five to seven hundred, and this year even exceeds the latter number.

Four Licensing Bodies are to be found in Dublin; namely:—

The University;
The King and Queen's College of Physicians;
The Royal College of Surgeons of Ireland; and
The Apothecaries' Hall.

Detailed accounts of each of these institutions from their origin to the present time, however interesting as a matter of local history, shall form no portion of the present communication; but we shall endeavour to point out briefly the position occupied by each at present.

Naturally the University holds the first place amongst the bodies empowered to qualify in medicine and surgery. The highest ambition of the Irish physician is to hold the degree of M.D. T.C.D. A qualification not commonly essayed, because necessitating tedious, laborious, and expensive curricula both in arts and professional studies. Latterly, the degree "Magister Chirurgiæ", conferred by the same university, has come into request, and has been demonstrated beyond cavil to be legal and sufficient for the majority of ends.

The King and Queen's College of Physicians enjoys a just and time-honoured reputation. At all periods its licence has been much sought after, but latterly especially so; because the moderate course of study demanded renders it accessible to the vast majority of those who, unable from deficient preliminary education or leisure to attain the university degree, nevertheless require the great desideratum of modern days—a purely medical qualification in addition to the ordinary surgical diploma. Unfortunately, however, the Fellow or Licentiate of the College of Physicians cannot, as such, style himself "M.D.;" although not long since a contrary opinion was formally received from a high legal authority and promulgated. It is needless to re-open here the discussion of this point. In one word, the right to confer the title of "M.D." is restricted to the University; and we must add, in our opinion, both justly and naturally. It is but fair that those who have laboured for the higher qualification should be distinguished from those who have not done so; and to the *Alma Mater* alone should belong the gift of the Doctorship in medicine.

The Royal College of Surgeons in Ireland enjoys a popularity quite unrivalled in this country, and one which is likely to increase, now that party feuds (of which we shall later say a few words, but indeed as few as possible) have satisfactorily come to an end.

The Society of Apothecaries occupies a most respectable position; yet its qualifications must be looked upon as merely *subsidiary* for those persons who are destined to engage in the full practice of the profession. Its licence is not recognised as sufficient *alone* for the army, navy, or other public services.

Speaking of these several institutions it is scarcely necessary to remind anyone who has visited Dublin of the situation and beauty of the buildings which are devoted to the medical department in the University. The recently finished side of the new quadrangle in Trinity College—one of the most exquisite specimens of Byzantine architecture in existence—is largely devoted to the medical lectures, examinations, etc. The Royal College of Surgeons of Ireland can also, it is well known, boast a handsome and suitable Hall; but, the question may be asked, where is the College of Physicians?

Hitherto, and for years past, its meetings have been held and its business transacted in a few rooms in Sir Patrick Dun's Hospital. Such indifferent accommodation and the unsuitability of the building, which moreover is quite on the outskirts of the city, had long and often stimulated the members of the college to exert themselves for the remedy of so great an evil; yet the insufficiency of funds cramped their movements; and it is only within the last year that a device was suggested whereby to raise money for this desirable purpose. The device consisted simply in the issue of debentures to the Fellows and Licentiates, bearing a fair interest guaranteed from the income of the college. Five thousand pounds were thus raised in a few weeks; and the house recently occupied by the Kildare Street Club was purchased. Not many days after the transaction, the club house was burned to the ground. However, were it not for the calamitous loss of life on that occasion, the College of Physicians might rejoice at the accident, inasmuch as the insurance has considerably exceeded the sum paid for the building, and enabled the executive authorities to erect one in exact conformity with the tastes and wants of those interested.

I shall not make the present communication a very lengthy one, because being *preliminary* it necessarily contains rather heavy details of the existence, locality, etc., of the various medical colleges of Dublin. Nevertheless it will be found useful, paving the way to a comprehension of their relative positions, and the working of the profession in this city. Ere long we shall resume our "special correspondence" with your JOURNAL.

Progress of Medical Science.

APOPLECTIFORM CEREBRAL CONGESTION. The subject of "*la congestion cérébrale apoplectiforme*" is at present attracting great attention among our professional brethren in Paris. A memoir bearing this title, which was read before the French Academy by M. Trousseau, on the 15th of last January, has elicited a lengthened and most interesting discussion. A man, says M. Trousseau, without any premonitory symptoms, suddenly falls down in what appears to be an apoplectic fit; he is taken up in a state of stupor; and, for a quarter of an hour, an hour, or even longer, his intelligence is confused and his gait uncertain. The following day, he is quite well. Or again, another man, while walking, is seized all at once with giddiness; he loses his sight, and ceases speaking, or mutters a few unintelligible words; he staggers, and sometimes falls down, getting up again immediately. This state lasts for a few seconds; it may be followed by a feeling of slight oppression in the head, and sometimes by a very brief confusion of the intellect; but three or four minutes suffice for complete restoration to health. In both of the conditions just described, it has been and still is the custom in France to say, that the patient has had an attack of "*congestion cérébrale apoplectiforme*". M. Trousseau formerly adhered to the common belief; but his experience during the last fifteen years has been gradually leading him to the conclusion, which it is the object of his present memoir to develope, viz., that in the great majority of cases just indicated, there is no cerebral congestion at all, but that the phenomena are of an epileptic nature, or even allied to syncope. According to M. Trousseau, epileptic vertigo, and giddiness resulting from derangements of the stomach and diseases of the ears, have too frequently been thought to proceed from cerebral congestion; and hence the bleedings and other depleting measures, which in France are still resorted to in such cases, are not only useless, but positively injurious.

Strange to say, M. Trousseau's opinions were most strenuously opposed by almost every speaker at the French Academy, including Messrs. Bouillaud, Baillarger, Beau, Durand-Fardel, etc.; all of whom maintained that cerebral congestion is of much more common occurrence than is urged by M. Trousseau, and that this condition really does exist in the cases under discussion.

On the other hand, M. Herpin of Geneva writes to the editor of *L'Union Médicale* that the opinions enunciated by M. Trousseau as apparently novel are identical with those to which he himself had arrived in the year 1840, and which had been published by him in 1852, in a work entitled *Du Pronostic et du Traitement curatif de l'Epilepsie.*

This discussion is not a little amusing to us in England, where, thanks to the labours and writings of Dr. Hughes Bennett, Dr. Todd, and others, the opinions advocated by Messrs. Trousseau and Herpin have long been regarded as established facts by all the more enlightened members of our profession. (*L'Union Médicale*, Jan. 17, 22, 31; and Feb. 7.)

HYPERTROPHY OF THE LIVER. That the liver may be greatly increased in size, as a consequence of various diseases of its tissue, or of the development of morbid growths, etc., is a fact of every-day observation, and universally acknowledged. Professor Frerichs, however, has called attention to a form of true hypertrophy of the organ which is much less generally known, and which we do not recollect to have seen alluded to in works on pathology. This hypertrophy consists in an enlargement of the liver, accompanied by an increased size of each individual lobule, and a simple increase in the size and number of the secreting cells.

In a normal liver, we can discover comparatively few indications of the cell-development which is constantly going on; but, in the form of hypertrophy alluded to, appearances are noticed, which unquestionably point to an increased growth and rapid new formation of the elementary glandular structures. Cells are observed, which attain to twice or three times their normal size, and almost all of which contain two or three large sharply defined nuclei, each of which is provided with one or several nucleoli. These cells are easily separable from one another, and have an irregularly angular form; their contents are more or less granular, and occasionally include isolated oil-globules or pigment-granules. In other cases, there are seen small rounded pale cells, firmly adherent to one another, with a large nucleus and slightly opaque cell-contents; they are mixed up with numerous free round and oval granular nuclei. These young cells and nuclei may constitute the greater portion of the hepatic tissue, or they may coexist with a greater or less number of the larger cells first described. When the large cells predominate, the lobules stand out prominently from a cut surface, and are much enlarged; but when the small cells are most numerous, the lobules are rather indistinct, and the cut surface of the organ usually presents an uniform reddish-brown colour. In both cases, the volume of the gland is increased, it may be, to twice or three times its normal size.

The circumstances under which this form of hypertrophy has been observed are the following:—

1. In cases where one portion of the gland is destroyed in consequence of previous disease. Here the hypertrophy would seem to be of a complementary nature.
2. In diabetes mellitus, it is of frequent, although by no means of universal occurrence. For the interesting remarks made under this head, we must refer our readers to the translation of the second volume of Professor Frerichs' work, which will shortly be published by the New Sydenham Society.
3. It has been observed in a considerable number of cases of leukæmia attended by enlargement of the spleen.

The same condition of the liver has been noticed under many other circumstances which have not yet been sufficiently investigated. *Post mortem* examinations are still wanting, before we can decide whether the enlargement of the liver, which has been observed to result from long residence in warm climates, is or is not an example of true hypertrophy. (Frerichs, *Klinik der Leberkrankheiten*, vol. ii.)

CALCIFICATION OF THE CEREBELLUM. Professor Poelman of Ghent has lately recorded an instance where the cerebellum of a dog was found almost completely converted into calcareous matter. The case was of no small interest, as serving to confirm the views of M. Flourens, that the principal function of the cerebellum is to regulate the voluntary muscular movements. For a year before its death, the animal was quite unable to regulate its movements, and from time to time exhibited gyratory motions of the strangest description. (*La Presse Méd. Belge*, Jan. 13th, 1861.)

Acephalocyst of the Brain. A female, aged 38, died recently under the care of M. Baillarger, in the Hospice de la Salpêtrière. An hydatid cyst, measuring one inch in length and four lines in breadth, was found imbedded in the middle of the posterior lobe of the right hemisphere. The case was of considerable interest, from the symptoms exhibited during life. About a year before her death, the patient began to complain of severe pains in the head, and at the same time strabismus was developed. Four weeks before death, she was suddenly seized with delirium. She boasted of her beauty, and fancied that she was the queen of heaven, and crowned with diamonds, etc. At the same time, the right pupil was observed to be much larger than the left. The dilated pupil, together with the peculiar character of the delirium, encouraged the belief that the case was likely to turn out an example of general paralysis. For a fortnight before death, the symptoms were, violent fever, loquacious delirium, and constant agitations of a semi-convulsive character, of the head, arms, and pelvis. These movements did not affect one side of the body more than another; and there was no hemiplegia. (*Gazette des Hôpitaux*, Jan. 15th, 1861.)

Syphiliphobia, in M. Diday's opinion, is one of the most common and important of nervous diseases. It constitutes, or complicates, one-fourth of the cases that come under his notice. Moreover, it is the fear of syphilis, and not syphilis itself, which impels many persons to commit suicide. M. Diday divides cases of syphiliphobia into two great classes. In the one, the patient has a dread of syphilis without any cause, not being affected with the disease; in the other, the patient has syphilis, and the syphiliphobia is symptomatic.

In the treatment of the former class, M. Diday recommends that, after listening to the patient's whole story, we should frankly tell him our mind, and endeavour to disabuse him of his false notions. At the same time, we must enjoin a good diet, an active life, and everything calculated to divert the mind from brooding over the imaginary disease. If these measures fail, an antisyphilitic remedy may be prescribed; and the fact of its producing no benefit at the end of a fixed time may be used as an argument against the patient's having syphilis.

When the patient has really had syphilis, and exhibits an inordinate dread of its effects, everything should be done to quiet his apprehensions. He may be assured that syphilis never proves fatal; that, when properly treated, it may be cured completely, causes no apparent deformities, and does not render it necessary for the patient to give up his ordinary avocations; and that it may be possible for him to marry, without any bad effects ensuing either to his wife or family. We must refer the reader to the original memoir, for much valuable advice for our guidance in the treatment of these difficult cases. (*Gaz. Méd. de Lyon*, 16th Jan. and 15th Feb., 1861.)

Invagination of the Jejunum. A case of invagination of the jejunum was recently brought before the notice of the Société de Chirurgie, by Dr. Cambay. The patient was a soldier, aged 42. Death resulted from perforation of the sheath, and peritonitis. The peculiarity of the case lay in the fact that a fibrous polypus, having a diameter of nearly an inch and a half, was found growing from the inner surface of the jejunum, immediately below the intussusception. This tumour had caused considerable constriction, with dilatation above; and in this way it seemed to have been the determining cause of the invagination. (*L'Union Méd.*, Jan. 22nd, 1861.)

Lithotrity. During the year 1860, M. Civiale has treated thirty-seven cases of stone by lithotrity. In thirty-four of the thirty-seven cases, a complete recovery ensued; in three, the cure was incomplete, because the patient laboured under other diseases; one only of the patients died. During the same period, M. Civiale had recourse to lithotomy in seven cases; of these, three proved fatal, and two were still under treatment. In the cases where lithotrity was practised, the stone was small, and of recent date. When the disease is of long standing and the stone is large, lithotomy becomes necessary. M. Civiale's facts prove the danger of delay in cases of stone, and the great advantages to be derived from lithotrity in the early stages of the malady. (*Monit. des Sciences Méd.*, Feb. 2nd, 1861.)

Baths of Compressed Air in the Treatment of Emphysema and Asthma. M. Bertin, of Montpellier, has applied this method of treatment to ninety-two cases of long-standing emphysema, supervening upon repeated attacks of bronchitis or asthma. In sixty-seven of the cases, a complete cure resulted; of the twenty-five others, great relief was afforded in almost all, and in not a few a perfect cure would, probably, have been obtained had not the treatment been too much interrupted; in three only of the cases was the treatment quite ineffectual. The treatment consists in introducing the patients, at stated intervals, into a chamber filled with condensed air. The subject is attracting considerable attention in France, and merits investigation. We understand that at Paris there is now an establishment where these baths can be obtained. (*Gaz. Méd. de Lyons*, 1st Feb. 1861.)

Cure of Neuralgia by Neurotomy. An Italian surgeon, M. Inzani, records the case of a man aged 31, who for ten years had suffered from intense neuralgia of the lower jaw. Every conceivable treatment, including division of the inferior dental nerve after trephining the bone, had proved quite ineffectual, and the patient's general health had become greatly impaired. Excision of a portion of the lingual nerve was followed by a complete and permanent cure. The neuralgia was supposed to have its seat in the filaments supplied by the lingual nerve to the gums. These filaments are described as ramifying between the mucous membrane and the alveolar periosteum. (*Gaz. Méd. de Paris*, Jan. 12, 1861.)

Treatment of Nervous Colic. M. Tisseire, a surgeon in the French army, recommends a treatment for nervous colic, which he has always found perfectly successful, and which has the great merit of being always ready at hand. It consists in the employment of dry and rapid frictions with a piece of flannel or linen over the abdomen. (*Gaz. Méd. de l'Algérie*, 1860.)

Cure of Phlegmasia Dolens by Collodion. M. Latour records a case of phlegmasia dolens coming on in a female aged 20, after her confinement, which was cured by the local application to the affected limb of a mixture of collodion and castor oil. The application of this subtance was followed by immediate relief; the inflammation ceased to spread. On the following day the patient was able to move her limb; and from this date she continued to recover rapidly. The collodion was applied in a continuous thin layer, with the object of preventing contact with the air. (*L'Union Méd.*, 15th Jan., 1861.)

Caoutchouc in the Treatment of Phthisis. Professor Hannon, of the University of Brussels, recommends the internal use of a solution of caoutchouc in turpentine in the treatment of pulmonary consumption. Caoutchouc, when swallowed in the solid form, is indigestible, and is passed *per anum* unchanged. When dissolved in turpentine, however, it is said to be digested with facility. No article of respiratory food can compete with caoutchouc; a circumstance which is sufficiently explained by the large amount of carbon and hydrogen which enters into its composition (C^8H^7). Administered in phthisis, it eases the cough, diminishes the expectoration and dyspnœa, checks the fever, night-sweats, and diarrhœa, and causes the patient to gain flesh. So, at all events, says M. Hannon. The manner in which he prepares and administers the caoutchouc is as follows:—One part of very pure caoutchouc is cut into small pieces and immersed in two parts of essential oil of turpentine. One drop of this solution is made into an electuary with three drops of the essential oil of bitter almonds and a little syrup, and administered three or four times a day. The dose of caoutchouc may be gradually increased. (*La Presse Méd. Belge*, Jan. 27th, 1861.)

Lupus. During the year 1859, thirty-four cases of lupus were treated in Professor Hebra's clinique at Vienna. Of these, nineteen were males, and fifteen were females. As to situation, the disease was in the face, chiefly the nose and lips, in twenty-eight cases; while in the remaining six, it attacked the upper arm, the elbow, the hand, the back, the thigh, and the neck. The treatment consisted in the application, twice a week, of solid nitrate of silver to the indurated tissues. When this has been destroyed, the application of a solution of iodine in glycerine is to be substituted. At the same time, cod-liver oil is to be administered internally. (*Spitals-Zeitung*, Feb. 2nd, 1861.)

Treatment of Measles. A prize has recently been awarded to M. Moynier, Chef de Clinique of the Faculty of Medicine at Paris, for an essay on the Complications of Measles and their treatment.

When the cough is very frequent and harassing, M. Moynier recommends a draught containing about a grain of extract of henbane, with one drachm of almond oil, and half an ounce each of solution of gum arabic and of syrup.

When the eruption is pale, or slow in developing itself, small doses of James's powder are to be given, or a mixture containing, in each dose, two drachms of liquor ammoniæ acetatis, one drachm of tartar emetic wine, together with syrup of raspberries and elder flower water.

When the eruption is retarded, or is not developed, the best treatment is that recommended by Trousseau, and known as *urtication*. This consists in beating the body with the recent leaves of the common nettle, or *urtica urens*, two or three times in the twenty-four hours.

Tepid baths are useful, in the event of suffocative catarrh; and for laryngeal affections, the best treatment is that practised by Graves, which consists in passing a sponge steeped in very hot water rapidly over the neck, and repeating this several times.

In the case of delirium and other severe nervous symptoms, the following combination of musk and carbonate of ammonia is found very serviceable:—℞ Pulv. mosch. gr. vj; ammon. sesquicarb. gr. iij; sacch. alb. gr. iss; mist. camph. ℥iv. M. A tablespoonful to be taken every two hours.

To prevent the bad effects of exposure to cold during convalescence, M. Scoutteten's practice is the best. This consists in rubbing the body all over with a piece of flannel steeped in warm olive oil. The next morning the patient has a tepid bath; and about two hours afterafter, the oleaginous inunction is to be repeated. After this treatment, it is stated that patients recovering from both measles and scarlet fever may be exposed to the cold with impunity. (*Journ. de Méd. et de Chir. Prat.* 1861.)

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

Monday, February 7th, 1861.

E. H. Sieveking, M.D., President, in the Chair.

Disease of the Knee-Joint. Mr. Weeden Cooke exhibited the bones of the knee-joint of a young woman upon whom he had recently performed amputation of the thigh. Both the semilunar cartilages were gone as well as the crucial ligaments, the ends of the bones had also lost nearly the whole of the periosteum. It was a case of rheumatic arthritis in a scrofulous subject. Mr. Cooke had been anxious to perform excision of the joint, but owing to the rapid progress of the case, and the supervention of pyæmic symptoms he did not think this operation gave the patient the least chance of restoration. In performing the amputation he adopted a modification of Teale's plan from which he had seen some excellent results in the Royal Infirmary at Edinburgh, under the care of Mr. Spence. He made a long anterior flap sufficient to turn over and cover the bone, and no posterior flap—the integuments and muscles posteriorly being divided flush with the section of the bone. The long anterior flap was brought over the bone, and united by means of silver sutures with the integuments posteriorly—thus forming a nice cushion for the bone. The great advantage of this mode of operating is that, the purulent discharge cannot collect, and runs out as the stump lies on the pillow. Although the heart and lungs in this case were considered by Dr. Cockle, the physician to the hospital, to be in an unhealthy state, chloroform was, nevertheless, administered at the request of the patient, and no ill effects were produced.

WHAT WE KNOW OF PHTHISIS REGARDING ITS CURE.

BY J. E. POLLOCK, M.D.

The author first spoke of the various stages of phthisis, which disease he did not regard as necessarily making a steady progress to decay, but frequently exhibiting a succession of attacks, and susceptible of local repair. Such cases he had seen, the system sometimes opposing itself to morbid action in so marked a manner as to cause very considerable prolongation of life. Regarding the cure of phthisis, Dr. Pollock said he had no specific to offer, and thought that no cure in the popular sense would be discovered. He was of opinion that the average duration of life since the use of cod-liver oil, as stated by some authorities at four years, was too low an estimate. Tubercle, it was said, might be absorbed, leaving the lung sound by excavation and cicatrisation, or a cavity sometimes remains circumscribed, the patient living for years. Waste of tissue might be retarded by stimulants. Several photographs of patients when first going under treatment, and those taken at long intervals of time, were exhibited to the Society, which last gave evidence of favourable results.

Dr. Camps, Dr. Fuller, Dr. Wadham, the President, and other members took part in the discussion.

Thursday, February 21st, 1861.

E. H. Sieveking, M.D. President, in the Chair.

The Turkish Bath. A discussion, introduced by Dr. Langmore, upon the use of the Turkish bath, enabled many of the members present, to record their personal experience of its effect upon them, and their ideas regarding its employment as a remedial agent. The general opinion of the speakers seemed to be, that in many chronic affections, "where not contraindicated by disease of the heart and vessels," it might prove of great benefit as an adjunct to other remedies, especially when time and experience had proved to what degree of temperature it might with safety be employed in this climate. A feeling against the present fashion of its indiscriminate employment by the public was not only unanimously expressed, but supported by the relation of several instances in which it had produced alarming syncope.

The Surgical Diseases of the Tongue. By Weeden Cooke, Esq. Casually glancing only at the varying aspects of the papillæ in diseases which come more immediately under the notice of the physician, Mr. Cooke gave a rapid survey of those injuries and diseases of the structure of the tongue which are generally considered to be surgical cases.

Wounds, whether incised, contused, or lacerated, invariably heal rapidly in healthy constitutions; a circumstance which is doubtless due to the high organisation of the part, and, in some measure perhaps, to the beneficial influence of the salivary secretion.

Idiopathic glossitis was a remarkable disease arising at times without any assignable cause, and, happily, entirely under the control of the surgeon. Incisions and antiphlogistic treatment very quickly overcome the malady.

Hypertrophy, depending either on chronic inflammatory action or on tuberculosis, was a more serious and protracted lesion of this organ. In either case, it was an indication of diminished vital power, and for its relief cod-liver oil and iron, with or without iodide of potassium, and generous diet, generally proved most beneficial. It was, however, always a troublesome affection, the cure of which required great patience and prudence on the part of the sufferer. Sea-air was always most serviceable in these cases.

Ulceration occurring in this organ was either aphthous, dyspeptic, strumous, syphilitic, or cancerous. The proper diagnosis of the origin of the ulcer was most important, inasmuch as the treatment required in each case was peculiar to itself, and could not be beneficial unless addressed to the systemic condition out of which arose the ulcer under consideration. After describing the aphthous, dyspeptic, and strumous ulcers of the tongue, and exhibiting, drawings of them, Mr. Cooke contrasted especially the syphilitic and cancerous ulcers of this organ, and stated that they were often confounded; that syphilitic ulcers with much induration of the tongue had been treated as cancerous, remaining for years without benefit until the proper diagnosis being arrived at, they had been cured so rapidly as to excite wonder on the part of the patient. Whenever a person presented himself with an ulcer of the tongue it was always necessary to investigate minutely his whole constitutional history, observing with especial care any cutaneous eruption of even the most trifling character. Thus armed, we may arrive at a mature judgment respecting the group in which it should be classified, the treatment it should undergo. "And in these investigations," said Mr Cooke, "it is necessary to take nothing for granted: the patient often deceives himself, or is really ignorant of his having a syphilitic taint; and if we do not examine carefully for ourselves, we also shall be led astray in the diagnosis, upon which depends the life and happiness of the patient, as well as our own credit as skilful surgeons." After describing the different characteristics of syphilitic and cancerous ulcers of the tongue, Mr. Cooke alluded shortly to the distinction between

Syphilitic and Cancerous Tumours of this organ, showing that the soft elastic feel of the one contrasted vividly with the hard cartilaginous sensation produced by the other.

Operations for cancer of the tongue never succeeded in checking the disease for any length of time; if it did not return in the organ itself, the sublingual, or submaxillary glands quickly took on the same action, and the misery of the patient was enhanced by the transfer. Of the three modes of operating, by ligature, by the knife, and by the écraseur, Mr. Cooke had no doubt that the knife was the most desirable. He had seen very bad results from the use of the écraseur.

Local and Constitutional Treatment was of the utmost value in the malignant, as in the non-malignant affections of the tongue. In the latter class a cure was always to be effected, whilst in the former much relief from suffering was to be obtained, and in some instances the disease had been arrested in its progress. Lotions of chlorate of potash, sulphate of copper, borax, etc., were commended, together with the internal administration of the mineral acids, bark, iron, and cod-liver oil.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, February 26th, 1861.

F. C. Skey, Esq., F.R.S., President, in the Chair.

ON A CASE IN WHICH LABOUR WAS TWICE PREMATURELY INDUCED ON A DWARF WITH DISTORTED PELVIS.

BY EDMUND A. KIRBY, M.D.

[*Communicated by* Henry Wright, M.D., M.R.C.P.]

The woman, a dwarf of singular small stature and ill development in infancy. She had rickets, and her osseous system was considerably distorted; but some other members of the same family were also very diminutive in stature and development, who, nevertheless, were exceedingly well-proportioned, and apparently free from disease. Therefore, apart from the distortion consequent upon the rickets, she was no doubt a true dwarf. When first seen by the author, in the early part of 1858, she was twenty-seven years of age, had been married twelve months, and had completed her thirty weeks of uterine gestation. She had a strumous aspect, and her general health was indifferent. On a careful examination, the spinal column and pelvis were found to be greatly distorted. The former, from the last cervical to the union of the last dorsal and first lumbar vertebræ, measured fourteen inches, and presented three curvatures, two lateral and one angular forwards. This latter curvature involved the whole of the lumbar and the last dorsal vertebræ, the bodies of which were thrust forwards, downwards, and to the left. The pelvis was contracted in all its dimensions, and slightly flattened from before backwards; the promontory of the sacrum and last dorsal vertebræ projecting forwards to the pubis, narrowing the antero-posterior diameter of the upper outlet to rather *less than two inches and a-half.*

Natural labour being impossible, the choice lay between craniotomy and the induction of premature labour. The latter was determined upon, the time chosen being the thirty-second week of gestation, but it was delayed for a week owing to the patient suffering from bronchitis, and was only completed at about the thirty-fourth. Induction of the labour was commenced on Jan. 30th; and she was delivered on Feb. 7th. On rupture of the membranes, the elbow was found in the vagina, and the shoulder resting on the brim of the pelvis, the child lying transversely. This embarrassing presentation was converted into a footling, by turning, and in about twenty minutes the patient was delivered of a living child. Both progressed favourably, and in a few weeks the woman returned to her usual avocations perfectly well. In this case about two ounces and a quarter of ergot were employed with the most useful effect, and without occasioning the least bad symptom in mother or child.

A few months later, this dwarf again became *enceinte*, and, having completed her seventh month, applied to the author, who again induced premature labour. This time, however, owing to the lateness of her application, and to the labour proceeding more slowly than in the first case, the delivery was not effected until she had completed her eight months of uterine gestation, and the fœtal head had attained a degree of development incompatible with its safe passage through so contracted an outlet. The child was therefore lost, but the parent recovered as rapidly as before, and she has not since been pregnant. Her first child has grown nearly as tall as herself.

The means employed to induce both labours were fully described. The author laid much stress on the value of the operation, and its great superiority to craniotomy, in which operation one in five mothers dies, while in induction of premature labour one only in fifty dies; and half the children are saved. The success of the latter operation, he thought, greatly depended on keeping the membranes entire until the os uteri was fully dilated, and he reprobated the rupture of them as a means of inducing labour.

The paper was accompanied by stereoscopic photographs, taken by Dr. Wright about a fortnight before the last delivery.

ON PULSATING BRONCHOCELE. BY JOSEPH BULLAR, M.D.

Two cases of bronchocele were reported, in which the distinctive complication was the violent pulsation of the carotid arteries and of the enlarged thyroid arteries, communicating the pulsation and thrill to every part of the enlarged lobes. In one of these (a male), the pulsation and *bruit* were so communicated to the lobes, the enlargement of which was of small size, that the case had been suspected to be cartoid aneurism, and it required careful examination to be certain of its exact nature. It was brought on by pressure, round the neck, of tight shirt collars, the patient being in a state of great debility. Under a tonic regimen, with quinine, iron, iodide of potassium, in small doses internally, and iodine externally, the pulsation gradually ceased, so that twelve months afterwards the only vestige was a small hardness of one lobe. In the second case (a female), the bronchocele was much larger, the pulsation even more pronounced, and with great distension of the veins of the neck. This was combined with disease of the heart, ascites, and anasarca of the legs. Under diuretics (including digitalis and iodide of potassium) and iron, the dropsical symptoms were removed, and at the same time the pulsation and venous distension ceased, and she was restored in five months to comparative health. Iodine externally somewhat diminished the bronchocele. Sir Benjamin Brodie, who saw the first case, in a letter given, states that he has only seen one other. In both cases, that undue prominence of the eyeballs which often attends bronchocele in the anæmic, was well marked, and remained, though diminished.

ON THE INFLUENCE OF OZONISED COD-LIVER OIL ON THE PULSE. BY E. SYMES THOMPSON, M.D.

The author began by reminding the Society of a paper by his father, Dr. Theophilus Thompson, published in the *Transactions* of the Royal Medical and Chirurgical Society, vol. xlii, 1860, in which the attention of the profession was first drawn to the subject. He recorded the cases of about twenty patients at King's College Hospital, to whom the ozonised oil was administered. The usual dose was two drachms twice a day. Scarcely any effect was observed from doses of one drachm. The influence of the oil on the pulse increased in proportion to the dose in which it was given, the effect of half-ounce doses, two or three times a day, being more marked than that of smaller quantities. The following table exhibits as simply and concisely as possible the results:—

Table showing the Changes of Pulse under Ozonized Cod-liver Oil.

Name.	Sex.	Disease.	Time of taking oil.	Pulse.	
				Before.	After.
J. P.	M.	Phthisis, first stage	7 days	116	98
J. S.	M.	Ditto	7 „	120	108
W. B.	M.	Tuberculous larynx	21 „	112	92
M. H.	F.	Phthisis, second stage	7 „	80	80
E. A. W.	F.	Ditto	14 „	140	112
C. H.	F.	Phthisis, first stage	14 „	100	104
R. N.	M.	Phthisis, third stage	7 „	150	116
E. D.	M.	Phthisis, second stage	7 „	138	112
J. O'D.	M.	Emphysema	4 „	104	86
M. M.	F.	Phthisis, second stage	5 „	140	108
E. R.	F.	Anæmia	4 „	120	116
M. S.	F.	Phthisis, third stage	2 „	94	92
E. H.	F.	Phthisis, second stage	10 „	104	88
W. S.	M.	Phthisis, first stage	7 „	104	104
P. R.	M.	Phthisis, third stage	4 „	104	96
S. E.	F.	Phthisis, second stage	20 „	120	92
G. M.	M.	Phthisis, third stage	4 „	140	120
H. C.	F.	Phthisis, first stage	2 „	108	95
W. H.	M.	Phthisis, first stage	5 „	120	96
J. R.	M.	Phthisis, first stage	9 „	120	98

The author also recorded the effects of ozone in another form. He had made use of the ozonised water (as prepared by Condy), and found its influence in retarding the pulse considerable. In reference to a belief still prevalent amongst some members of the profession that ozone was a high oxide of hydrogen, the author remarked that he had used the peroxide of hydrogen (prepared by Messrs. Bullock), and found that it exerted no special influence on the pulse, which was more often accelerated than retarded under its use, which seemed to corroborate the conclusions of Dr. Andrews, who showed (in the *Philosophical Transactions* of the Royal Society, vol. 146, page 1, *et seq.*), that ozone was not an oxide of hydrogen, but simply an allotropic modification of oxygen. Of the twenty cases in which ozonized oil was given, in eleven the pulse was reduced more than twenty beats a minute; in four, upwards of ten beats; in one, no effect was produced; and in one only was any permanent acceleration observed, and this could only be fully accounted for by disturbing circumstances. Of the seven cases in which ozonised water was given, in three the pulse was lowered more than twenty beats, in three about ten beats, and in one it was at one time retarded, and at another accelerated.

Dr. Thompson drew special attention to the importance of the inquiry as connected with the treatment of phthisis, since in this disease anything that could retard the excessive rapidity of the vital changes would likewise check the development and progress of the disease. He showed that this had long been realised by the profession, and mentioned several remedies that had been used for this end, especially digitalis, which, though useful in some cases, was greatly inferior to ozone, being both less certain in its action, and often dangerous from its cumulative tendency; while ozone exerted on the heart, not a depressing, but a strengthening and vigorating influence. It was suggested that the explanation of the remarkable effect of ozone in phthisis might be found in the greater affinity which phthisical blood had with oxygen, an affinity which it also preserved when in the allotropic form of ozone.

Before concluding, the author alluded to a paper recently published by a French physician, "On the Use of Ozonised Oil of Turpentine in Hæmoptysis," in which the suggestions made by Dr. Theophilus Thompson in 1859 had been followed, and observed that he had himself prescribed turpentine with ozonised cod-liver oil in hæmoptysis with much benefit.

Correspondence.

WET-NURSING: ITS EVILS.

Letter from Edward Daniell, Esq.

Sir,—I have read with great interest your leader in the Journal of January 19th, on the evils of wet-nursing, and the subsequent letters on the same subject. I think I should be justified in giving an opinion on this matter, after the long and extensive practice I have had as an accoucheur in a provincial district, whence wet-nurses are usually sought.

It has been my lot, as a parochial medical officer, to be frequently called upon to attend the deserted children of wet-nurses, and to find them pining away from the loss of that aliment which Nature alone can manufacture, and which Art tries in vain to imitate. Even if Art could do anything, the poorer classes know nothing of the compositions designed to imitate Nature's own food; nor will they take the trouble, even if they had the means, to seek any other aliment than what comes immediately within their reach; and that is ordinarily sopped bread—bread compounded as it is with most destructive adulterations, creating acidity, flatulency, irritation, and constant suffering. No wonder the child is drugged with druggists' compounds, and passes thereby narcotised to the grave. If, however, by virtue of robust and vigorous constitutions, they escape the diseases mentioned by Dr. Routh, rachitis and permanent deformity frequently supervene—curved spine, crooked legs, large head, chicken-breast, etc.

There is, however, a point to which I wish to call attention, and which hitherto in this discussion has been overlooked. I allude to the weakening of those bonds of love between mother and offspring which the non-suckling of an infant will be very apt to induce. One of those beautiful arrangements of Nature, existing alike in the highest and the lowest of the class mammalia, is the exquisite sympathy indicated by the mother for her helpless and unprotected offspring. This maternal tenderness has its origin in a fundamental principle implanted in the nature of every creature of the class alluded to, and is found in the most savage and ferocious of animals—in the lion, the tiger, the polar bear. And, during the time of lactation, how exquisitely tender is the maternal solicitude! How bold and daring the spirit which, forgetful of self, protects and sustains the future lord of the forest, or the shaggy denizen of the frozen seas! But when the period of lactation is over, the maternal solicitude weakens, and gradually ceases altogether; verifying that quaint adage, "As they grow up, they grow out."

That God has designed all mothers to suckle their own young is obvious, from the fact that He has himself implanted a desire for it, and renders to the mothers a series of exquisite pleasures even in the very act, and in numberless instances inflicts physical evil for the non-fulfilment of this duty. How many wealthy and titled dames have succumbed, and perished early, from setting aside this law of Nature, to follow the flimsy dictates of fashion or convenience!

The natural affection, too, is apt in no small degree to be alienated from having been thus abruptly weakened. Observe the devoted mother, as she is administering Nature's own food to her infant. How tender and gentle she is; how her eyes beam with love and affection; and how, as the child advances, and scintillations of intelligence are manifested, the chain lengthens, and wraps its invisible fibrils around its infantile heart, "growing with its growth, and strengthening with its strength." Feelings of love to its kind protector are nurtured and matured, to be destroyed only in the grave. Who amongst us, having had a loving mother, does not revere her in life? and, even when time shall have whitened our locks and furrowed our cheeks, and there is but a step between us and eternity, who does not remember, long after her bones are ashes, her fond smile, her affectionate embrace?

Compare, I say, these feelings, etherealised and beautiful, with the cold and formal morning, and perhaps nightly, visit to the nursery where the hireling foster-mother is doing the fashionable matron's duty. Is that cold kiss, those placid inquiries, and those every-day directions, anything but a series of business transactions? Is there any indication of that pure thread of sympathy—that flow of loving-kindness—those smiles of endearment—those outpourings of the heart—which characterise the mother who repudiates the hireling, and performs the duty herself?

I shall give one case in particular, for the truth of which I pledge myself, which shows how likely the best feelings of the heart may be extinguished by disobeying this beautiful law of Nature.

A lady, from some cause or other, was obliged to give up her first-born child to the tender mercies of a wet-nurse. In process of time, she was confined of a second child, which she was able to nurse herself. The result, according to the views I have taken, may be almost anticipated. This second child absorbed all her love; the first was shamefully and cruelly neglected; it rarely appeared in the parlour, was suffered to run wild in the kitchen, and was always the guest of the servants, being very rarely found in the family room. She imbibed habits amongst this class of persons which would be likely to lower the tone of her mind and character; and, when a woman, she became the drudge—the "Cinderella". The result is obvious enough. This really beautiful girl sank so low as to elope with a vulgar fellow, gave birth to a child, and died.

I am, etc., Edward Daniell.

Newport Pagnell, February 26th, 1861.

ON THE INTERMARRIGE OF RELATIONS, AS A CAUSE OF DEGENERACY OF THE OFFSPRING.

Letter from James Gardner, Esq.

Sir,—The above subject was commented on in a number of the British Medical Journal a week or two ago; and I beg to offer a few remarks.

There are some subjects received in our early education from our teachers, which we are too apt, I think, to take as a matter of course, without the trouble of further investigation; and the above is, I consider, one of them. It seems to be a principle laid down, that in the animal, and likewise in the vegetable system, an occasional change is required to renovate and produce healthy offspring; and the generally received opinion is, that the marriage of cousins or near relations tends to degenerate the children and produce scrofula, etc.

In the country, about a year ago, I was talking on the subject to an intelligent farmer, who was notorious for his good breed of sheep and cattle. His principle was, that relationship was of no consequence, so that the animals selected were healthy, and came from a healthy stock; and he showed me a beautiful specimen of a young bull from a cow by her son. He also referred to animals in a state of nature, where relationship must be carried on to an indefinite extent, such as the stag and sheep; the strongest and most healthy being kept up by the stronger males destroying the weaker ones, which we see likewise in the game-cocks. I saw likewise a very valuable colt belonging to another farmer, a great breeder; and, on inquiring the pedigree, I found he was of the same opinion as the other, and that this colt was a breed from a near relation. He likewise referred me to the pedigree of the famous racehorse Eclipse, I think; and ran over a list of his breed and descendants, proving them to be all bred from blood-relations.

The analogy to the human race, it may be perhaps said, will not hold good; and I only wish to speak of cousinship, as it is not likely that relationship will extend further in man. I cannot but think that there are other causes besides mere relationship which tend rather to produce degeneracy in the offspring of such unions; and it would be interesting to make further search, by collecting a certain number of cases of marriages where the parties are relations, and where they are not so. There is one thing to be remembered—that in relations, generally speaking, the marriages are interested. I am inclined to think that, when both parents are healthy and of a healthy stock, the offspring of such are just as likely to be healthy as those from a union where the parents are not related at all; and that, if you take, say a hundred cases promiscuously of each marriage, there will be found as many unhealthy and degenerate from the non-relations as from the others; and that the cause of degeneracy must be looked for elsewhere than in blood-relationship. Perhaps enough has been said to cause the subject to be further looked into.

I am, etc., James Gardner.

9, Crescent Place, Mornington Crescent, Feb. 26th, 1861.

THE TURKISH BATH.

Letter from J. L. W. Thudichum, M.D.

Sir,—In your article on the Turkish Bath, you mix up my "researches" with Dr. Richardson's "opinions" in a manner which is calculated to mislead all those of your readers who either have no original experience on the subject, or were not present when I replied to Dr. Richardson at the conclusion of the discussion before the Medical Society of London.

The value of Dr. Richardson's remarks will at once become apparent when I say that, at the time he spoke and wrote on "the hot-air bath", he had not been once inside such an institution.

My observations bore upon the influence of heat upon the HUMAN body, as obtained in the Turkish bath. So distinct was my definition, that it has survived in the passage in which you give me credit for having fully explained, according to my personal experience, "the physiological action of the bath upon the body human".

Whatever may have been Dr. Richardson's experiments, which he followed up "in his own experimental way, as a purely experimental pursuit" (which, to my mind, is a meaningless procedure), they were performed neither in the Turkish bath nor upon the human body. There is, therefore, here a *primâ facie* difference, which imperatively forbids all comparison of results.

Dr. Richardson has not even placed animals under circumstances analogous to the condition of a man in a Turkish bath. Some unfortunate beasts were locked up in closed chambers, and allowed to suffocate in their own exhalations. From these proceedings, carried on at various degrees of temperature (Heaven knows how regulated), he professes to have derived "*a law*", which he describes as steadily acting, but which, nevertheless, "perfect experiment would speedily reduce to absolute formulæ". The "law", consequently, had not yet had the benefit of "*perfect* experiment", and was not yet "reduced to absolute formulæ", and consequently was no law, but a fiction of his fancy.

By failing to perceive the fallacies in Dr. Richardson's remarks, you have of course become an accessory to them; and, thus biassed, you construct the following sentence: "But Dr. Thudichum was not only philosophic in his details; he was also enthusiastic in his praises of the bath. Dr. Richardson . . . . happily took a more moderate view of this calorific instrument." This sentence is not English as regards either grammar or morality; for, under the cloak of commendation, you insert the dagger which is to kill the confidence of your readers in my assertions; and this act you attempt to disguise by malversation of the language. Or is it not malversation in language to eulogise an author for his philosophic details, and to add that he was *also* enthusiastic in his praises, when it is intended to stigmatise these praises as a misfortune, and to elevate the opposition to them to the dignity of a happy occurrence? Such arts, which, when recognised in their true light, will make leading articles still more contemptible than they already are, cannot be allowed to pass, when objects are at stake which concern the welfare of mankind. If it is by means of them that the "proper control and authoritative criticism" (which you seem to claim for yourself, and for other persons living in utter ignorance of the subject) of the Turkish bath is to be exerted, I for one protest against the trickery of both control and criticism. If I am wrong in either my details or my conclusion, prove me to be so, and both will subside as a matter of course; but, as I was right in my details, there is a great presumption that I am also right in the general conclusions from my details, which you define as praises. Unable to shake my details, you make my recommendations suspicious by terming them "enthusiastic", leaving the reader to put that interpretation upon this double-faced word, which, from the nature of your sentence, and your initiatory "but", is unavoidable.

In the second paragraph of your article, you continue to pervert my own conclusions from my own experiments, and mix them up with those of Dr. Richardson in a manner against which I must again protest; for, while I attempted to reduce the effects of the bath to their simplest terms, by ascertaining the changes produced in the body, and their material products, Dr. Richardson did *not* tell us what are the "changes" (metamorphoses) caused in the body; he did not state the material products, nor the "metamorphoses" (changes), resulting from its (the Turkish bath's) action. His experiments consisted in causing the deaths of animals in closed chambers; and the only tangible result from them is, that death under such circumstances is quickened by increased temperature. The story of the rapid oxygenation, and of its rise to the eightfold amount in equal times at doubled degrees of temperature—this "steadily acting law"—is a simple fiction, because his animals did not die of oxygenation, but of suffocation by carbonic acid and water-vapour. Having unduly coupled my name and observations with Dr. Richardson's "experiments" and assertions, you fuse men and subjects altogether in the following sentence:—"From *their* (!) experiments, it seems to us to be a necessary consequence that the bath must be injurious to a person in health, in consequence of the unnatural waste of the body thereby excited."

I must first oblige you to keep my experiments separate from those of Dr. Richardson, as they have nothing whatever in common. I fully believe that a "bath" such as Dr. Richardsan gave to his victims must not only be injurious, but absolutely fatal to a man, whether in or out of health; but not on account of unnatural waste, but from the very reverse—the want of oxygen, or, more simply, by suffocation from irrespirable gas. From my own experiments on the Turkish bath, however, it follows not only that your conclusion *must be* erroneous, but that it positively *is* false; that the Turkish bath is not only not injurious, but positively beneficial, to a person in health; and the unnatural waste of tissue "thereby" excited, which you adduce as the cause of the *necessary* injury, is simple a product of your imagination.

You proceed to contemplate the "*moral aspect*" "*from which* the new luxury may be *viewed*", showing by those very words that you have taken up an impossible standing-point. It is not surprising that the East should come in for a share of declamation, such as is usual with persons who neither know the East nor their own country. The West has not only harems and voluptuaries, but in addition it has the social evil in a degree surpassing in magnitude and offensiveness any eastern country. The slothful pasha is not a privilege of the East; and obesity, there considered a misfortune, and, when excessive, counteracted, with us has become a subject of admiration. In Ludgate Hill hangs publicly exposed the life-size picture of "the fattest man in the world". One evil is peculiar to the West—the habit of drunkenness; and if I hope for any effect of the bath more than for another, it is that it will counteract this tendency to intemperance, which is now the main source of suffering and crime. This, then, is *my* aspect of the moral effects of the Turkish bath.

There is another airy weapon with which you fence throughout this leader, and that is the opinion of members of the Medical Society of London who made remarks upon my statements. That toy I must take from you, even at the cost of tears. Several of those members, who then opposed, now agree, having availed themselves of the opportunity offered to them by Mr. Urquhart of judging for themselves; and, notwithstanding their former opposition, are now candid enough to be advocates of the bath. One of them, Dr. Rogers, informed me on Friday last of his intention to build a Turkish bath for himself in his own house. The opposition of others—*e.g.*, Mr. Kiallmark and Dr. Tilt—has found other explanations. The latter gentleman in January denounced the "Turkish" bath, and on February 2nd recommended the "Roman" bath.

In cases of prophecy by ordinary men, such as debaters in medical societies or writers of leaders in medical journals, we are mostly right in taking the contrary of the prophecy or prediction to be the probable event. And thus your prophecy has increased my confidence in the adoption of this new habit by the nation as a whole; and, if you knew the smiles which your remarks have excited, and will excite, with numbers of healthy, strong, virtuous, and wise men and women, who consider two hours a week devoted to the bath as well applied, and as not leading them to either moral or physical deterioration, but to the contrary, you would sober down to the regret of having misapplied your type. It is the people who have adopted and applied the bath, and they are not going to give it up again at the bidding of a leading article. The bath now leads; and you, Mr. Editor, will find a bath on Fridays a reparatory process after the fatigue of the current number, and on Mondays a source of inspiration for forthcoming productions.

In one respect, all professional writers on the Turkish bath, including yourself, are unanimous; namely, in the opinion of its therapeutic value. All the discutants in the Medical Society of London had sent patients to the bath, and seen them benefited. A few persons only had been "damaged"; but in no case was the damage described in medical terms, and every case which I have investigated since has vanished into nothing. What belief in the innocuity of the Turkish bath must men have had, who, like Dr. Richardson and other debaters, and some acquaintance of my own out of the Society, actually did send patients into an institution, of the nature, arrangements, and working of which they knew nothing! Now if, under such favourable circumstances, not a case of injury has occurred, which can be medically defined, how much more useful must the bath become hereafter, when *knowledge* shall guide the practitioner in the application of this therapeutic instrument. But what you seem to think so difficult, so unlikely, or impossible, must no doubt take place before that happy event can be consummated—"our physiological and pathological ideas must undergo considerable change". You consider it "our duty as Doctors of the healing art *at this time* to step forward and tell the public what this bath really is", and are not aware that the public in this matter is far in advance of the medical profession; and that the profession, with few exceptions (the most brilliant one being the medical body at Newcastle), as a body, either take no notice of the bath, or without forethought denounce it. You have, therefore, erroneously defined our duty as Doctors of the healing art, which *at this time* simply is, to make ourselves acquainted with the uses of this therapeutic instrument, and to leave to others the adaptation of its social uses.

I am, etc., J. L. W. Thudichum.

65, South Audley Street, March 4th, 1861.

[Dr. Thudichum must take upon his own shoulders the credit or discredit which a writer will meet with who indulges in the kind of language to be found in this letter. We last week requested him to modify his mode of utterance, not for our own, but for his sake; and we can only regret that he has but so partially followed our advice. Editor.]

SANITARIAN HERETICS.

Sir,—The change that is coming over the minds of the Board of Health people on the subject of contagion is truly alarming to all right thinking persons. For more than thirty years after the first institution of that Board, the word contagion never once appeared in its publications, unless to be branded as a dangerous heresy; but now, sad to say, its officials and oldest disciples are, one after another, falling away from the true faith.

Mr. Rumsey, once so orthodox a believer, has come to admit that some fevers are communicable, and has begun to speak of the powers of sewers in an apologetic tone.

Dr. Greenhow confesses that typhoid fever is contagious; and, worse than all, Dr. Milroy has gone so far as to concede not only that cholera, but even yellow fever, may be propagated in the same way.

Why, sir, this is more than rationalism; it is rank infidelity; it is worse than the notorious *Essays and Reviews*. What has become of Mr. Chadwick? Where is Dr. Southwood Smith? Where are all the other famous anti-contagionist champions? It is high time that these great sanitarian bishops and archbishops should meet in convocation, and take measures to nip this abominable heresy in the bud, before it has had time to corrupt the minds of a too confiding laity.

I am., etc., Laicus.

March 1861.

CONTAGION OF YELLOW FEVER.

Sir,—In common with many others, I have read Dr. Bryson's paper on Yellow Fever with great interest. The facts are free from all ambiguity; they are well reported; and they prove, beyond the power of cavil or dispute, that this malignant fever is contagious. But it is right to remember that the same point was completely established by Sir William Pym nearly thirty years ago, by evidence quite as clear and decisive, and quite as ably reported. But this is not all. Sir W. Pym not only proved yellow fever to be contagious, but he showed that it shared with the other contagious fevers in the singular and all important characteristic which distinguishes them all, of being diseases that occur only once in life. The paper setting forth the facts on which this conclusion is founded is, in all respects, a most remarkable document. For the deep importance of the question at issue, and the singular precision and scientific beauty of the evidence brought to bear upon it, I will venture to say that this paper is scarcely equalled by any other piece of medical evidence extant. Among other illustrious names, it bears the signature of the conscientious Louis—a sufficient guarantee in itself for the perfect accuracy of its averments.

In proving this second point, Sir W. Pym not only made it very sure that the yellow fever poison is bred in the human body, but established a fact from which it may be inferred with almost equal certainty that it is not bred elsewhere.

I have thought it well to draw attention to these circumstances, because it does not appear from your report that Sir W. Pym was in any way referred to either by the author of the paper or by those who took part in the debate which followed. I am, etc.,

Palmam qui meruit ferat.

March 1861.

POISONING FROM ŒNANTHE CROCATA.

Letter from J. G. Appleton, Esq.

Respected Friend,—My nephew, Dr. Guppy of Falmouth, has sent me the following account of the cases of poisoning from the œnanthe crocata. Dr. Guppy says:—

"The two cases of poisoning you allude to, by œnanthe crocata, came under my notice four hours after the decease of the men, who were Austrian sailors. Four of them partook of it, two of whom ate only a little, and felt no ill effects; the two others, they said, died within a quarter of an hour, after complaining of giddiness, and falling down convulsed, which was borne out by their appearance when I saw them. They had been foaming at the mouth, and their countenances were pallid. There ought to have been a *post mortem* examination; but, far from that, the coroner and jury tried to come to a verdict without medical evidence. The coroner sat at 3 p.m.; and, the jury not being able to agree as to whether the symptoms described by the two men were such as would have been caused by the poisonous plant, I was called at about 6 p.m., and merely asked whether the symptoms were those arising from having partaken of the root. I told them I could not say that the men died from eating the root, unless, by a *post mortem* examination, I found some of the poisonous root in the stomach, which doubtless I should have done. They gave their verdict without any further inquiry; so these cases lost all their interest for publication."

Dr. Guppy further says:—

"The root was incorrectly described in the *Cornwall Gazette* as fibrous, with a number of tubers attached to it; hence its name 'dropwort'. It is a tap-root, something similar to the parsnip both in appearance and taste; it grows very abundantly here in moist places, by rivers, etc."

Mr. Brougham of Falmouth (Dr. Guppy's partner) had a similar case of poisoning by the same plant about fourteen years since. In that case, it was an Austrian sailor also. He was seized in a similar manner whilst in the act of stepping from the boat, in which he had been rowing, to his ship. The symptoms were the same—insensibility, convulsions, foaming at the mouth; and in that case almost instantaneous death.

I beg leave to direct thy attention to an admirable little work on *British Poisonous Plants*, by Charles Johnson, Botanical Lecturer at Guy's Hospital, 1856. I regret to say that this work, beautifully illustrated with coloured plates, is out of print. He says: "The water dropwort (œnanthe crocata) is perhaps the most virulent of the umbelliferous plants; and as its roots bear the same similarity to parsnips, in taste and appearance, that the leaves do to celery, accidents from its use have not been unfrequent. Some years back, a number of convicts, working upon the river-bank near Woolwich, found a quantity of this plant. Struck by its resemblance to the well known vegetables above mentioned, seventeen of them ate of it. Shortly afterwards, nine of the men went into convulsions, and became insensible; one died in five minutes, another in a quarter of an hour, a third in an hour, and a fourth a few minutes later; two more expired in the course of a few days. They appear to have partaken of both root and leaves. The poisonous principle seems to reside in a yellow juice, which stains the hands that gather it. In a dry situation, this juice is produced in but small quantity, and the plant is less virulent."

Dr. Robert Hooper, in his *Medical Dictionary*, records the following facts in confirmation of his opinion that the root of this plant is the "most deleterious of all the vegetables which this country produces". Mr. Howel, surgeon at Haverfordwest, relates that "eleven French prisoners had the liberty of walking in and about the town of Pembroke. Three of them, being in the fields a little before noon, dug up a large quantity of this plant, which they took to be wild celery, to eat with their bread and butter for dinner. After washing it, they all three ate, or rather tasted, of the roots. As they were entering the town, without any previous notice of sickness at the stomach or disorder in the head, one of them was seized with convulsions. The other two ran home, and sent a surgeon to him. The surgeon endeavoured first to bleed, and then to vomit him; but those endeavours were fruitless, and he died presently. Ignorant of the cause of their comrade's death, and of their own danger, they gave of these roots to the other eight prisoners, who ate of them with their dinner. A few minutes afterwards, the remaining two who gathered the plants were seized in the same manner as the first, of which one died; the other was bled, and a vomit with great difficulty forced down, on account of his jaws being as it were locked together. This operated, and he recovered, but was some time affected with dizziness in his head, though not sick or the least disordered in the stomach. The other eight, being bled and vomited immediately, were soon well."

At Clonmel, in Ireland, eight boys, mistaking this plant for water-parsnip, ate plentifully of its roots. About four or five hours after, the eldest boy became suddenly convulsed, and died; and, before the next morning, four of the other boys died in a similar manner. Of the other three, one was maniacal several hours, another lost his hair and nails, but the third escaped unhurt.

The information respecting the cases of poisoning in the boat's crew of four Austrians sent on shore for water at Falmouth harbour is, I am sorry to say, from the circumstances of the case, very brief and imperfect.

I am, etc., John G. Appleton.

Luton, 5th 3rd Mo., 1861.

THE LONDON MEDICAL REVIEW.

Letter from Samuel Wilks, M.D.

Sir,—I am not at all anxious to intrude my private concerns on your readers; but the public journals afford the only method by which I can make known my grievance. It is this: that I am supposed to be connected with a publication styled the *London Medical Review*; and, in consequence, have letters addressed to me from England, Scotland, and Ireland, asking me in what manner I am associated with it.

Will you allow me to inform your readers that I have no connection whatever with that publication, and never had any. I certainly, after a great deal of pressure, wrote a paper, for which I was paid; but I have repented it ever since, as I do not consider that my appearance in that print has at all added to my respectability.

If the unfair use of my name has induced any gentleman to contribute to it, I am not at all responsible; but I now trust that this announcement will prevent others from following their example.

I am, etc., Samuel Wilks.

11, St. Thomas Street, Southwark, March 9, 1861.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—I must again request the favour of space in your columns for the accompanying letter, which will explain that medical evidence will not be taken at present by the Select Committee on the Operation of the Poor-law Act.

In the House of Commons last Friday, Mr. Beecroft asked the President of the Poor-law Board why the Poor-law Board did not cause to be carried out by Boards of Guardians their instructions to remunerate the Poor-law medical officers. Mr. Villiers said he had some difficulty in answering the question, because the hon. member assumed as a fact, that which he (Mr. Villiers) did not know was the fact. The remuneration proceeded on the same principle as the payments of the other union officers, or at any rate he was not aware of any difference.

I believe the above quotation to be the correct one; but, as it is differently stated in five morning papers, I cannot vouch for its accuracy. Mr. Beecroft evidently referred to the fourth resolution of the Select Committee of 1854 on Medical Relief, which says, "They also recommend that the Poor-law Board should direct their attention to the salaries of the medical officers, which, in some cases, appear to be inadequate to the duties they are required to perform."

As Mr. Villiers does not know what Mr. Beecroft says is a fact, I will here relate that there are 1174 medical officers, whose salaries are so low, that, if they are divided by the number of patients attended, they will average less than three shillings per patient; yet some of the patients live many miles distant from the residence of the medical officer, and the average duration of their illness is over twenty-one days; and if those in the permanent list be included, and such ought to be the case, the period will be over three weeks. Of these 1174, 141 actually receive salaries so small that they average less than one shilling per patient; and some are as low as threepence. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, March 11, 1861.

"Poor-law Board, Whitehall, 5th March, 1861.

"Sir,—I am directed by Mr. Villiers to say that the Poor-law Committee held its first sitting to-day.

"As the inquiry to be made by the Committee is of a very extensive character, it is not expected that any evidence will be received upon the subject of Poor-law medical officers before the lapse of some considerable time; and you will receive a further communication in due course, if it should be determined hereafter to require your attendance as a witness.

"I am, sir, your obedient servant,

"Richard Griffin, Esq." "John Thornely.

The Coldest Town in Europe. Tornea, the capital of Russian Lapland, is in lat. 65° 59″ N, and is the most northerly town in Europe. The temperature there has lately been 40° below the centrigrade zero; *i.e.*, about 73° below the zero of Fahrenheit's thermometer. This extreme of cold is as great as the extreme of heat in India and Senegal. It is impossible to go out unless wrapped in furs from head to foot; the face must be entirely covered, the eyes being protected by glasses. Ardent thirst is felt, as in the desert; and, as water cannot be obtained, brandy is the only liquid that can be used; but even in taking this the vessel sometimes becomes frozen to the lips and tongue. The glass of the windows is broken if it be not protected by wooden planks; and, if the iron or copper work of the outer doors be touched, a sensation of burning is imparted to the hand. (*Revue de Thér. Méd. Chir.*)

Medical News.

Royal College of Surgeons. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at a meeting of the Court of Examiners, on March 8:—

Chapman, John, M.D., Albion Street
Davis, Frederick Vaughan, Cheltenham
De Leon, John, Jamaica, West India
Hill, Thomas Harvey, Sussex Terrace
Hollis, William P., Burton Crescent
Roberts, Francis O., Gloucester Terrace
Rowland, John, Newton Heath, Manchester
Smiles, William, M.D., Bedford Square
Wynter, Hugh B., Kensington

The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such at a meeting of the Council, on March 13:—

Ackerley, Richard Y., Liverpool: diploma of membership dated May 18, 1832
Arnold, James, Liverpool: May 5, 1841
Bowen, Robert, Rifle Brigade: May 11, 1840
Cape, Henry, H.M. Indian Army: May 1, 1840
Harrison, James, Bengal Medical Service: January 7, 1842
Rudall, Robert, Sheepwash: January 13, 1843
Smythe, Lewis, Lewes: August 19, 1839
Taylor, Thomas, Birmingham: April 6th, 1821
Webb, Allan, Calcutta: July 19, 1833
Wood, Samuel, Shrewsbury: July 14, 1837

Apothecaries' Hall. On Thursday, March 7th, the following licentiates were admitted:—

Fenn, Edwin, Ardleigh, Essex
Watson, Forbes, Nottingham

APPOINTMENTS.

*Cameron, John, M.D., appointed Lecturer on Medicine in the Liverpool Royal Infirmary School of Medicine, in the room of Dr. Inman, resigned.
Head, Thomas, M.D., elected Physician to the Carlisle Dispensary.
Monckton, Stephen, M.D., elected Physician to the West Kent Infirmary.

Royal Army. The following appointments have been made:—

Birnie, Assistant-Surgeon Thos. K., 1st Foot, to be Staff-Surgeon.
Mockler, Surgeon-Major E., retired upon half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals.

Royal Navy. The following appointments have been made:—

Breakey, John, M.D., Assistant-Surgeon, to the *Formidable*, for service of Royal Marines at Deal.
Browning, B., Esq., Assistant-Surgeon, to the *Cockatrice*.
Coulter, Joseph, M.D., Surgeon, to the *Calypso*.
Domville, H. J., Esq., Staff-Surgeon, to the *Formidable*, for service of Royal Marines at Deal.
Donovan, Jeremiah, Esq., Acting Assistant-Surgeon, to the *Icarus*.
Gilbert, Robt. T. H., Esq., Acting Assistant-Surg., to the *Calypso*.
Kynsey, J. F., Esq., Acting Assistant-Surgeon, to the *Weser*.
McKenna, Arthur, Esq., Assistant-Surgeon, to the *Hogue*.
Middleton, Jas., M.D., Acting Assistant-Surgeon, to the *Conqueror*.
Parker, James, Esq., Acting Assistant-Surgeon, to the *Procris*.
Stronson, John M., Esq., Assistant-Surgeon, to the *Conqueror*.
Wilson, David. Esq., Assistant-Surgeon, to Plymouth Hospital.
Wyse, James, Esq., Assistant-Surgeon, to the *Victory*, for Haslar Hospital.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Woollcombe, R. W., Esq., to be Surgeon Devon Militia Artillery.

To be Honorary Assistant-Surgeons:—

Maskeleyne, G. H., Esq., 8th Corps Berks R.V.
Nelson, S. C., Esq., 2nd Isle of Man R.V.
Traill, J., Esq., 3rd Forfarshire R.V.
Wilson, J. G., Esq., 12th Shropshire R.V.

DEATHS.

Bannister. On March 8, at 63, Coleshill Street, aged 6 months, Edith, daughter of H. P. Bannister, Esq., Surgeon.
Drysdale. On March 8, at 9, St. George's Terrace, aged 66, Ann, widow of George Drysdale, M.D., R.N.
Hendley. On February 1, at Corfu, Alice, infant daughter of John Hendley, Esq., Surgeon 2nd Regiment.

Jones. On March 10, at Dalston, aged 2, Catheriue F., daughter of John D. Jones, M.D.

Roots, Henry S., M.D., at 2, Russell Square, aged 75, on March 6.

Robinson, Charles, Esq., Surgeon, at Altrincham, aged 63, on February 6.

Tapson. On March 8, aged 6 months, Alfred L., only son of Joseph A. Tapson, Esq., Surgeon, Clapham.

Tyacke. On March 4, at Chichester, aged 43, Frances Anne, wife of *Nicholas Tyacke, M.D.

Wakefield, Henry, Esq., Surgeon, at 52, Russell Square, aged 68, on March 8.

Poor Law Medical Relief cost £236,339 in the year 1860.

Bad Meat. During the past week 4434 lbs., or nearly two tons, of meat unfit for human food were seized in the City markets.

M. Poiseuille, the inventor of the hæmadynamometer, has been appointed inspector of primary instruction in the department of the Seine.

The Junior Medical Society of London. A general meeting of the members of the several Hospital Medical Societies in London was held at King's College on Tuesday last, when a code of laws for the guidance of the new society was discussed and agreed to.

The Academy of Medicine. M. Claude Bernard has been elected to the vacant seat in the Section of Anatomy and Physiology of the French Academy of Medicine. He has rare qualifications for the performance of his duties at the College of France. He is a first-rate chemist, as well as a consummate anatomist.

The Indian Army. The Queen has appointed James Brown Gibson, M.D., C.B., to be one of Her Majesty's Commissioners to inquire into and report upon the measures which it may be expedient to take for maintaining and improving the health of all ranks of Her Majesty's army serving in India, in the room of Thomas Alexander, Esq., C.B.

M. Lélut has resigned his post as physician to the Salpêtrière. It is said that several candidates will appear at the *concours* which will shortly take place for the purpose of appointing his successor. In consequence of the retirement of M. Lélut, it is said that Dr. Moreau will pass from the Bicêtre to the Salpêtrière; and that Dr. Marcé will take the Bicêtre.

Longevity in France. The average number of persons who die annually in France at the age of 100 and upwards, is 148. The longevity is mostly attained in the mountainous departments; but the department of the Seine furnishes a fair share. There does not appear to be any direct relation between the number of cases of great longevity and the average duration of life in the several departments.

The Medical Society of Bordeaux has awarded the prizes for an essay on The Prophylaxis of Tuberculosis as follows:—Honourable mention to Dr. Edwin Lee (of London), and to MM. Desayvre (of Châtelherault), Rey (?) (of Edinburgh), and Castiglioni (of Milan); a silver medal, value 100 francs, to M. Ullersperger (of Munich); a gold medal, value 300 francs (the prize) to M. L. Perrond, *interne* of the hospitals at Lyons.

London Fever Hospital. Dr. Tweedie has resigned the office of Physician to the London Fever Hospital; and has been elected Consulting Physician and Vice-President of the Hospital. Dr. Jenner has also resigned his post of Assistant-Physician to the Hospital. It is generally understood that Dr. Murchison will succeed Dr. Tweedie; and in such case, two vacancies for Assistant Physicians will present themselves to the attention of aspirants for gratuitous medical honours.

The Medical Act. The National Medical Registration Association have forwarded a petition to the General Medical Council, in which they state that the Medical Act has "failed to effect the objects for which it was passed," and that the object of Clause 40 is frustrated by the decision of judges that no person is liable to punishment unless he represents hmself falsely as having been registered under the Act. They pray for an amendment of the provisions of the Act, and more especially of Clause 40.

Medico-Chirurgical Society of Glasgow. At a meeting of this society held on Tuesday evening last, in the Faculty Hall, the following gentlemen were elected office-bearers for the ensuing session: *President*—Professor Pagan; *Vice-Presidents*—Dr. Thomas Watson, and Dr. Paxton (Kilmarnock); *Council*—Mr. John Reed, Dr. Howate; Dr. Tannahill; Dr. R. Paterson; Dr. McKinlay (Paisley); Dr. G. H. B. Macleod; *Secretaries*—Dr. Lyon, and Dr. J. G. Wilson; *Treasurer*—Dr. John Coats.

Medical Vacancies.—The following appointments are vacant:—Physician to the United Hospital, Bath; Physician to the Westminster General Dispensary, Gerrard Street, Soho; House-surgeon to the Northampton General Lunatic Asylum; House-surgeon and Dispenser to the Chesterfield and North Derbyshire Hospital; Assistant House-surgeon to the Chichester Infirmary; Assistant resident medical officer to the General Infirmary, Leeds; Surgeon to the Clifton Dispensary for the district of St. John's, Redland; Surgeon to the House of Correction and House of Detention, Clerkenwell; Surgeon to the Ripon Infirmary and House of Recovery.

Mineral Substances in Coloured Wafers. Dr. Blondlot, of Nancy, having examined a large number of coloured wafers, has found that all the red ones contain minium (red oxide of lead), almost all the yellow ones chromate of lead, and the green ones a mixture of chromate of lead with prussian blue. The red wafers almost always contain so much oxide of lead, that the metal can be readily detected, on burning two of them, both by the eye, and by the application to the ash of dilute nitric acid, followed, on separate glasses, by hydrosulphate of ammonia, sulphate of soda, chromate of potass, and iodide of potassium. (*Revue de Thér. Med. Chir.*, March 1.)

The Medical Service in India. In the House of Commons, on March 8th, Sir S. Northcote asked the Secretary of State for India whether he had received a memorial from Surgeon-Major Hochin, of the Bombay Presidency, complaining of the discrepancy in the dates of the two Royal Warrants for the Royal and the Indian branches of the Medical Service respectively, whereby two surgeon-majors of the Royal army, Messrs. Inglis and Fraser, had been placed above twenty medical officers on the Bombay Establishment of much older standing in the service than themselves; and whether he proposed to take steps for rectifying this inadvertence.—Sir C. Wood was understood to say that no such document had been received.

Mysterious Disappearance of a Medical Student. A painful feeling has been excited at St. Thomas's Hospital, owing to the mysterious disappearance of Mr. T. H. Morris, one of the students of the hospital. On the 5th of February he left his rooms in the afternoon, took some money out of his desk, and after putting on his great coat, and exchanging his cap for his hat went out, and has not since returned. His absence was communicated to his family on the 12th or 13th of February, and information given to the police; but all efforts to discover his whereabouts have been unsuccessful. Not the least singular fact in connection with the disappearance of the young man is that he had been most assiduous and attentive to his studies and hospital lectures, was of quiet manners and habits, and not known to have any vicious connections or propensities.

The Gorilla. At a recent meeting of the Royal Geographical Society, M. Du Chaillou gave an account of his travels in the region of Western Equatorial Africa.

The most interesting part of his narrative was the information he gave of the gorilla, which, in its physical structure, more closely resembles man than the chimpanzee, or any other beast. M. Du Chaillou stated he had shot twenty of these creatures. When the narrative was concluded, Professor Owen explained, with the assistance of diagrams, the points of resemblance and difference between man and the gorilla; and concluded by insisting that the amplest accommodation ought to be provided for the exhibition of the collections of natural history. Two of the gorillas which had been shot by the traveller were exhibited in the hall. In compliance with a request from the Chairman, the Chancellor of the Exchequer addressed a few words to the meeting. It had, he said, been a great treat to listen to the narrative of one of the most modest and most gallant and enterprising of travellers, and to hear his rich and rare discoveries illustrated by one of the most brilliant and distinguished of scientific men.

Medical Society of London. The eighty-eighth anniversary meeting of this society was held at the Thatched House Tavern, on Friday, the 8th instant; Dr. Garrod, F.R.S., President, in the chair. The following gentlemen were declared to be elected the officers and council for the ensuing year:—*President*, W. Coulson; *Vice-Presidents*, H. Lee; F. W. Mackenzie, M.D.; C. H. Rogers-Harrison; F. Sibson, M.D. *Treasurer*, J. Bird, M.D. *Librarian*, J. Cockle, M.D. *Secretaries in Ordinary*, H. Salter, M.D.; G. Lawson. *Secretary for Foreign Correspondence*, T. Davidson, M.D. *Councillors*, W. Adams; T. Bryant; G. Buchanan, M.D.; E. Canton; W. T. Dyer, M.D.; A. Fisher; A. B. Garrod, M.D.; S. O. Habershon, M.D.; C. J. Hare, M.D.; T. Hawksley, M.D.; A. Henry, M.D.; J. Love; P. Marshall; J. F. Marson; S. W. J. Merriman, M.D.; R. Read; W. R. Rogers, M.D.; S. J. A. Salter, M.B.; J. S. Stocker, M.D.; J. Townley. *Orator for* 1862, P. C. Price. The oration was delivered by Dr. Leared; and the silver medal was declared to have been awarded to Dr. T. Davidson, who has performed the duty of foreign secretary during twenty-five years. There was no award of the Fothergillian medal this year. After the meeting, the Fellows of the Society dined together.

Health of the Army. The profession ought to show the very largest amount of health and strength. The members of it are men picked for physical soundness and vigour. The recruit cannot pass unless he has a firm and straight spine, a chest that will expand freely, joints that will work well, eyes that will see well, a voice that will resound well, ears that will hear well, strong limbs, distinct utterance, a healthy throat, supple hands, an arched foot, and so on. Even sound teeth and straight and supple toes are required, and all signs of old disease are a cause of rejection. Men who set out with bodily advantages like these ought to have health and long life, apart from the perils of the battle-field, which destroy a very small proportion of the soldiers who die. There is every reason for confidence that the soldier will flourish henceforth. The causes of the great mortality are detected and in course of rapid removal; and, as we see, there are already places to which we can point as showing the fine state of vigour to which the soldiery of England and her dependencies can be brought. The State having done what it can, the rest will depend on the individual soldier. If he eschews excess of every kind and indolence he may pass a long life in comfort and vigour. If, moreover, he has a patriotic heart, or knowledge enough to be aware what it is to be at once a citizen and a defender of Old England, he may have a life of that higher order which is seasoned with a temper of heroism, and exalted by a severe spirit of honour. There is no reason why every private soldier and sailor should not be a "happy warrior" as well as a Wellington or a Nelson. (*Once a Week.*)

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.
Friday. ...... Westminster Ophthalmic, 1·30 p.m.
Saturday.....St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 8.30 p.m.
Tuesday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."—Statistical.—Pathological.
Wednesday. Meteorological.—Society of Arts, 8 p.m.—Geological.
Thursday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."—Zoological.—Antiquarian.—Linnæan, 8 p.m.—Chemical, 8 p.m.—Harveian, 8 p.m.—Royal.
Friday. Royal Institution.
Saturday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."—Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—March 9th, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week......................	Boys ..1066 Girls..1006	2072	1279
Average of corresponding weeks 1851-60		1799	1422

Barometer:
Highest (Sat.) 30.241; lowest (Sun.) 29.553; mean 29.887.
Thermometer:
Highest in sun—extremes (Fri.) 95 degrees; (Tu.) 55 degrees.
In shade—highest (Fri.) 60 degrees; lowest (Tu.) 34.2 degrees.
Mean—45.2 degrees; difference from mean of 43 yrs.+5.1 degs.
Range—during week, 25.8 degrees; mean daily, 13.4 degrees.
Mean humidity of air (*saturation*=100) 87.
Mean direction of wind, S.W.—Rain in inches, 0.18.

TO CORRESPONDENTS.

Poisoned Wheat.—Dr. Lister will feel obliged if he can be informed, through the medium of the Association's valuable Journal, of the average quantity of strychnine contained in one of the fourpenny packages of Barber's Poisoned Wheat.

A Question of Right.—Mr. Thompson, who is now with me, and thoroughly qualified, is requested by a policeman to examine a girl on whom an attempt is supposed to have been made on her person. He does so, and is further requested by the policeman to attend at Epping, six miles from my residence, to give evidence. He goes, and the case is dismissed; and when Mr. Thompson applies to the magistrates for his fee, they coolly tell him they have no money, and that he was not bound to attend before he was paid. Are not the magistrates bound by law to pay a fee; and can a fee under the circumstances be recovered?

I am, etc., R. N. Day.
Harlow, Essex, March 11th, 1861.

[We cannot give a positive answer to this question; but we should say that Mr. Thompson cannot recover. There can be no earthly doubt of his moral right to a fee. Editor.]

A. M. S.—The Occhiombra may be obtained of Messrs. Weiss, 62, Strand.

COMMUNICATIONS have been received from:—Mr. R. N. Day; Mr. W. W. Thomas; Mr. T. Moore; Mr. D. M. T. Jones; Mr. T. T. Blease; Mr. F. D. Fletcher; Dr. Lister; T. G. S.; Mr. R. Griffin; Mr. Joseph Toynbee; Dr. Wm. Hinds; Dr. Inman; Dr. McWilliam; Dr. Thudichum; Mr. W. Sankey; Dr. J. G. Wilson; Mr. T. M. Stone; Mr. Hioginbottom; Dr. Waters; M. A. B.; Dr. Wilks; Dr. Sansom; Dr. Roberts; Mr. H. Terry, jun.; Mr. Duckworth; Mr. H. C. Woods; Mr. T. O'Connor; Dr. G. E. Paget; A. M. S.; and Mr. D. R. McNab.

Clinical Observations

ON

A CASE OF CLOT IN THE CEREBELLUM.

OCCURRING AT ST. MARY'S HOSPITAL.

BY

JAMES ALDERSON, M.D., F.R.S.,
SENIOR PHYSICIAN TO THE HOSPITAL.

I believe that the following case presents features sufficiently infrequent and instructive to deserve record. The young woman was sent into the Hospital by an able practitioner in the neighbourhood, Mr. Walker; who finding, very justly, an anomalous set of symptoms in the case, and feeling assured that they indicated graver disease than was palpable to view, urged the patient to be taken into the house without delay. She had been under his care a week, with apparent hemicrania.

The case is drawn up by Mr. Morgan, clinical clerk, who, with Mr. Chisholm, one of the house-surgeons, had the immediate charge of the young woman during the short period she lived.

Case. Mary Ann White, aged 21, servant, admitted under Dr. Alderson, February 8th, 1861. A fortnight ago, without any apparent cause, she was suddenly attacked with extreme pain over the lower portion of the occipital bone. The pain was accompanied by bilious vomiting, which, during the first few days, was nearly incessant, both by day and night. The pain at the back of her head has continued ever since; and during the last few days has been getting worse. The vomiting, though less severe than during the commencement of the attack, has come on to some extent every day.

The patient appears to be in intense pain, and constantly keeps up a half-suppressed moan. She is unable to take any food. The bowels are natural; pulse 64; skin sometimes hot and dry, sometimes cold; tongue furred. The pupils contract naturally; and are not unusually either contracted or dilated. Sensation and motion are both quite perfect. There is no hemiplegia nor paraplegia. The mind is quite unaffected. She describes the pain as intense, and as if a hole were being bored at the back of her head.

From the time this report was taken till her death, about twelve hours later, no change occurred.

Morbid Appearances. The dura mater was healthy. The surface of the hemispheres presented the usual degree of vascularity; they seemed to bulge somewhat, and the convolutions appeared slightly flattened. The substance of the brain was of normal consistence; a little whiter perhaps than usual. The ventricles were much distended, containing about two ounces of clear colourless serum. There was no softening at any part of the walls of the ventricle, nor any unusual vascularity. When the encephalon was removed from the cranial cavity, the left side of the cerebellum was noticed to be rather large, and to the touch it felt soft. An incision was made into its under surface along the centre of the middle crus cerebelli, from the pons to the outer border of the left lobe, and a clot of blood was exposed at the anterior and internal part of the lobe. The clot appeared to be of considerable size. It was black and soft. The sides of the cavity in which it was lodged were smooth and of a pink colour. There was staining of the dura mater in the cerebellar fossa, but none of the extravasated blood had escaped from the cerebellum. The other viscera were healthy.

It will be seen that there was a total absence of all the symptoms usually attributed to the presence of a clot in the brain, and to effusion within the ventricles.

There was no loss of power either of motion or of sensation; no stertorous breathing; no loss of consciousness. The pupils of the eyes were quite normal, and there was no intolerance of light or sound until the day on which she died. The pulse was below the natural standard; but there was a slight hesitation in the beat which *approached* to irregularity. Within an hour of her death she got out of bed without any assistance, and within a couple of hours of it asked me if she might have her "tea as often as she liked, as it was the only thing she *really enjoyed.*"

Considering these symptoms of fixed pain confined to a spot in the left occiput; the vomiting; the plaintive voice and the slight hesitation in a slow pulse; there was a certain amount of evidence on which to predicate the grave nature of the disease, and even the precise locality of the lesion, although not sufficient to determine the existence of a clot.

We must suppose that, in this case, the blood had been poured out slowly—that it had oozed out in fact—so as to give time to the system to accommodate itself to the presence of extravasated fluid; of this accommodation by time, we have numerous instances. In phthisis, for example, the whole of the lungs almost may be destroyed as breathing organs, with scarcely any apparent interference with the function of respiration; whilst, in pneumonia, one-fourth part of such interference would shortly destroy life.

Dr. Brown-Séquard, in his Gulstonian Lectures, lately given at the College of Physicians, has said that there is no symptom during life proper to disease of the cerebellum, by which an infallible diagnosis of the nature of the lesion can be made; and he hence infers that we know nothing of the functions of that organ. Abercrombie has given several cases of disease in the cerebellum with extravasation of blood, in which no symptom is detailed beyond fixed pain in some particular part of the occiput accompanied by vomiting.*

This case, then, may be received as an instance attesting the soundness of Dr. Brown-Séquard's newly promulgated views, shewing, as it does, that a large clot of blood may be present in the cerebellum without the display of any of those symptoms which are usually understood to be necessary in order to mark the existence of pressure on the brain.

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* In one of these cases the pain was intermitting, and came on at a particular time in the day, simulating hemicrania.

Original Communications.

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Continued from page* 252.]

iv. In referring to the destructive changes which are liable to ensue in tubercular conditions of the lymphatic ganglia, it was stated that ulcerations, or the natural mode of allowing communication between the external tissues and an affected gland, may take place in two distinct ways: either at several points on the surface; or by the formation of a large ulcerative opening at that part where the covering textures have become thinnest. It was likewise observed that both processes are attended with consequences which it is most desirable to avoid; and that it is all important to adopt such local means as are best calculated to promote healing, and obtain the least possible amount of disfigurement.

As it is only on a clear insight into the exact condition presented by individual examples of tubercular ulceration, that judicious local assistance can be afforded, it is impossible too urgently to insist on the necessity of correctly understanding the simplicity or complications which render the mischief more or less amenable to one or other of the following modes of surgical treatment.

Fomentations and Poultices. When a tuberculous gland has suppurated, and the purulent matter has been discharged by ulceration of the covering integument, it commonly happens, owing to various causes, that the destructive process is accompanied with pain and tenderness, which can only be relieved by the application of such means as we are now considering. It is impossible for the unhealthy margins of these ulcerations definitely to contract and heal, before the entire gland, or so much of it as is involved in disease, is destroyed.

The sluggish action which usually renders tubercular disease of the lymphatic glands such a tedious affection, at once suggests the propriety of applying poultices of various descriptions, to encourage the ulcerated parts to assume a healthy suppurative condition, whereby the processes of granulation and repair may the more readily be accomplished. Poultices made of linseed, bread, carrot, or chopped seaweed, I have frequently seen used by my father with very great success, which may be employed, according to the irritable, painful, or tardy nature of the sore. By the alternate resort to fomentations and poultices, recent suppurative and ulcerative action is often, not merely amended, but completely controlled, especially when antiscrofulous remedies are internally administered. When the discharge accompanying the unhealthy condition of these ulcerations is thin and sanious, and the parts are devoid of any great amount of tenderness, it will be advantageous to apply some stimulating application, and then, by means of a poultice, to encourage such processes as alone can lead to satisfactory results.

But, while recommending the use of poultices, I cannot too forcibly insist on the inconvenience which I have over and over again seen follow an indiscriminate resort to such applications. Flabby and unhealthy conditions are not only maintained, but absolutely increased by this constant process of soddening, while the pale and ill-formed granulations which spring up, are rendered still more unfit for permanent and efficient repair. It is by no means unusual, on questioning a young patient suffering from tuberculous ulcerations, on the neck, for instance, to find that poultices have been applied to them for years without producing the expected amount of good. As a rule, therefore, I think, it may be stated, that poultices are of most value when the ulcerations are recent, painful, and remain intractable, on account of some active destruction which is still taking place in the gland over which they are seated; and after stimulating and corroding applications have been employed, for the purpose of changing or destroying the peculiar character of the sores.

Lotions. Mr. Russell has observed that, "in the treatment of scrofulous ulcers under the ordinary circumstances of the complaint, the simplest and mildest dressings answer best." (*Op. cit.*, p. 105.) Accordingly, this distinguished surgeon was in the habit of recommending the frequent ablution of tuberculous ulcerations with sea and cold spring water, and, it appears, with considerable advantage.

When the ulcerations are not complicated by sinuses running into a cavity containing a partly destroyed gland, or extending to indefinite distances under the skin, the application of certain astringent and other washes, is often useful. A decoction of oak bark, or walnut leaves, a solution of alum, sulphate of zinc, and many other substances, will be found of benefit, especially when they are kept in close contact with the granulating surface.

But of all liquid applications, a solution of iodine, in the form of the simple tincture diluted with water to the necessary strength, or aqueous solutions of one or other of the salts of iodine will be found of most avail. The contact of iodine seems to exercise a special, and, oftentimes, immediate effect on the diseased margins; and, although, from various causes, its application will not always be followed with anticipated results, still it justly ranks among the most potent agents which are at the disposal of the surgeon.

Natural baths, impregnated with iodine and bromine, have long been valued by continental surgeons, as a most valuable adjunct in the treatment of tuberculous ulcerations. MM. Lugol and Baudelocque both strongly recommend the treatment of all such cases by artificially prepared baths, containing one or other of these powerful agents, and have each described a method by which one holding iodine in solution may, under ordinary circumstances, be readily and inexpensively supplied. The following formulæ are calculated from French measures by Dr. Ranking, who wisely adds that the bath used should be either of wood or marble, as iodine forms soluble compounds with zinc, tin, or lead.

M. Baudelocque's formula is as follows:—Water, 60 gallons; iodine, 2 drachms; iodide of potassium, 4 drachms. Lugol's formula is stronger, consisting of 3 drachms of iodine, and 6 of iodide of potassium to an ordinary bath. The quantities for children should be about one-third those for adults. (*Op. cit.*, p. 249.)

I have frequently succeeded in obtaining healing and cicatrisation of tuberculous ulcerations and fistulous tracks, by the application of a lotion composed of from five to thirty drops of the simple tincture of iodine to an ounce of water. Iodine, topically applied, seems to possess a special influence over lesions of this character; but it cannot be denied that its good effects are generally more marked when, at the same time, it is administered internally.

Besides the application already mentioned, that known as *black wash*, composed of varying proportions of calomel and lime water, is, oftentimes, the best that can be used. It is astonishing to see how rapidly mercury in this form will sometimes arrest the sanious discharge from the pale and irritable margins of the ulcer, and afford fresh vigour to the secreting surfaces. I have known some of the most refractory scrofulous sores heal rapidly and permanently under this treatment, and I could quote cases to prove its value when other applications had been vainly tried.

c. Unguents. In the simplest forms of ulcerations following tubercular destruction of the lymphatic glands, my own experience leads me to speak but disparagingly of the value of ointments, although I am aware that many excellent surgeons regard them as of the very highest utility. I have been led to this opinion from numerous disappointments which have followed their use. While, however, I disapprove of their general employment in such instances as above-mentioned, still I admit their advantages on occasions when sinuses and fistulæ need stimulating, and when irritability and pain urgently demand the local and continual contact of narcotics. In a word, they may really prove of utility when a recourse to lotions and various solutions is inadmissible. When ointments are employed on account of the chronic and complicated character of the ulcerative surfaces, those composed of the various forms of iodine and its salts will be found among the most useful. I can specially recommend an ointment composed of iodide of ammonium in the form already indicated.

The *Unguentum Elemi*, the *Unguentum Plumbi Iodidi*, or the *Unguentum Hydrargyri Iodidi*, will be found valuable when indolence and inactivity render the mischief tedious and difficult of healing. Portions of one or other of these ointments may be kept in contact with the ulcerated surface, by being spread on slips of lint, or rubbed into cotton wool.

But in whatever stage of the affection, and in whatever way such applications are used, I must confess that I entertain for them no great predilection, when other means can be substituted. Without being by any means extraordinarily efficient, they have the disadvantage of proving to the patient both disagreeable and inconvenient applications.

d. Caustics. On looking through a long list of cases illustrating ulceration following suppuration of tuberculous lymphatic glands, the greater portion of which I have tabulated, and already, statistically and otherwise, referred to, I find that, in very many instances, the long duration of the diseased action had rendered the implication of the skin and areolar tissue more serious than might, at first, have been expected. When such was the case, it was found that the ulcerated integument presented thickened, indurated, and torpid margins, and was undermined to a various extent by tortuous channels, lined by a thick, pulpy, semi-gelatinous membrane, from the surface of which exuded a more or less sanious secretion; and that not only was there a complaint of constant annoyance and pain, increased on the accession of fresh inflammatory symptoms, but that the entire sore remained refractory to all local means hitherto enumerated and described. If, however, success attended the closest and best concerted topical treatment, it was only temporary; for the repair which resulted was rapidly destroyed by the formation of abscess in one of the enclosed fistulous channels, the contents of which found a ready exit through the new and non-consolidated tissue.

In addition, not unfrequently, the patency of a fistulous canal was found to depend on a portion of gland which, although involved in disease, was not in a condition to undergo complete disintegration.

The mere destruction of the unhealthy, hardened, and languid edges of such ulcers, as recommended and practised by some surgeons, is not, therefore, generally sufficient; and it becomes of the greatest importance that a correct appreciation of their true pathological condition and complications should on all occasions be obtained, ere such powerful remedies as caustics are called into requisition.

From these observations, it may be gathered that the use of caustics becomes expedient under three conditions:—Firstly. When the ulcerated surface is slight and only involves the skin, and, perchance, its connective tissue; Secondly. When the areolar tissue is more extensively affected, and the skin is undermined, the edges, at the breach of continuity, presenting the morbid appearances which have already been described; Thirdly. When fistulous channels extend from the implicated integument to deeper structures, and to entire or portions of diseased glands, and when, notwithstanding partial reparation and amendment, relapses ensue, causing further mischief, and rendering permanent cure still more difficult of attainment. To meet all these various conditions, caustics must be used in the light of destructive agents.

Firstly. When the ulceration is recent, slight, and comparatively superficial, it will generally be sufficient to employ caustic in such a way that the mere surface and margins of the ulcer are destroyed. The only caustics which I have recourse to for this form of ulceration, are the *nitrate of silver* and *potassa fusa.* Of the two, I prefer the former, as its application is not attended with the same amount of pain, its action being less severe. It may be used either in the solid stick, or in the form of a very strong solution applied by means of a camel's hair brush.

Ulcerations of this description are usually met with on the neck, and produce a very considerable amount of inconvenience and discomfort. The peculiar kind of scabbing which takes place, forming hard, dry, brownish-yellow incrustations over the surface, tends materially to increase the disfigurement which they cause. To remove this dried secretion, it will be necessary to employ a poultice before applying the caustic in the way I have recommended.

The details of the following case will serve to show in what way I am in the habit of topically treating such forms of ulceration as are now under consideration.

A young gentleman, aged 16, was brought to me from France, in April 1860, on account of an ulcer of the size of a five-shilling piece, situated close to the right clavicle. For some years he had suffered from various forms of scrofulous disease, but had gradually improved in health, and the only ailment from which he suffered at the time I was consulted was this intractable ulcer. All disease of the glands had subsided. Every form of treatment had been employed without effect. Iodine had been enthusiastically pushed, but to no purpose. Every now and then, the ulcer was *lightly* touched with a caustic; but for six years it remained open, and discharged an unhealthy matter. A distinguished Parisian surgeon at last advised that it should be left alone, as in all probability its cure would be followed by a still more formidable scrofulous affection.

On his first visit to me, finding that the ulcer was in all respects one of the simplest form, I rubbed on its surface a stick of nitrate of silver. A desired eschar was produced. On the fourth day, this artificial scab separated, when the raw surface appeared less in extent, and was not nearly so tender. Healing was advancing from the circumference. This treatment was adopted on four more occasions; and, after the lapse of a month, I had the satisfaction of seeing the rebellious surface completely healed, and, after many months, I failed to discover any approaching symptoms of a worse form of disease. On the contrary, the patient rapidly improved in health and spirits, which had suffered great dejection from the long continuance of the ulcer. I have selected this case, as it admirably shows the way in which a caustic application should be used in all cases of this description.

If some of these ulcers, which are highly irritable and sensitive, be carefully examined, it will be found, as Mr. Hilton has practically shown, that these two morbid conditions are greatly, if not entirely, dependent on the exposure of minute nerves; and that, until such have been destroyed or removed, healing will not ensue.* I have always observed that scrofulous ulcers exhibiting great irritability and causing considerable pain are the most difficult to cure; and, even in unhealthy patients, it has often resulted that amendment of the constitutional powers has failed by itself to procure cicatrisation. From the highly sensitive condition which these ulcers sometimes present, it might be supposed that the application of the lunar caustic was a very painful operation. Such, however, is not the case; and I could advance many instances to prove the correctness of this statement.

Secondly. The use of caustics is called for when the diseased condition is of a more complicated character, and rendered so by the cellular tissue being undermined, and the margins of the ulcer appearing raised, flabby, redundant, of a peculiar purplish-blue colour, and exuding an unhealthy sanious fluid. The object in such cases is to destroy all the morbid parts, and, by means of mechanical treatment to be presently described, to render the healing as complete as possible. For the destruction and subsequent healing of ulcerations presenting this condition, M. Lugol was in the habit of applying a caustic solution containing iodine in the following proportions:—

℞ Iodinii ʒj; potassii iodidi ʒj; aquæ ℥iss. M. Fiat lotio.

Although I am not disposed to gainsay the advantage of such an application, still, judging from my own experience, I feel bound forcibly to recommend the use of the potassa fusa. It is astonishing to see the rapidity with which the most perverse scrofulous ulcerations heal after they have been somewhat heroically treated by this caustic. Some time since, being determined to investigate, more fully than I had hitherto done, the advantage of this form of treatment, a certain number of the very worst forms of scrofulous ulcerations were selected by my brother and colleague, Dr. W. P. Price, and carefully treated by him. The patients were inmates of the Children's Hospital at Margate, during November and December 1859. Without quoting the particulars of each individual case, I may briefly remark that, in the six instances selected, the disease was situated on the neck and beneath the angle of the lower jaw. In all, healing took place; and in the majority of the cases, comparatively slight scars remained. The application of the caustic in every instance was attended with some degree of pain; but in one in particular, a boy (J. D.), aged seven years, it was much more severe. In one or two of the cases, the ulcerations were likewise situated in other parts of the body, and to some of these the chloride of zinc was applied; but the potassa fusa appeared to be the more satisfactory application.

The greatest possible care must be taken when using this potent remedy; for it very rapidly dissolves, and, by coming accidentally into contact with healthy integument, is apt to cause mischief. Before applying it, I am in the habit of coating with oil or glycerine the normal skin immediately surrounding the ulcer, by which means any unintentional use of the caustic is not attended with serious consequences.

After the potassa fusa has been employed, nothing gives so much relief as smearing the surface with oil, and applying a tolerably warm linseed-poultice.

Some surgeons have recommended the occasional application of sulphate of copper to the flabby and irritable margins of the ulcers, with subsequent pressure by means of a pad and bandage. Although pressure is, without doubt, a valuable adjunct in the treatment of some forms of ulceration, still, I believe, nothing short of actual destruction of the diseased parts, especially when of long standing, will lead to a favourable issue.

In adverting to the treatment required for the removal of scrofulous scars and cicatrices, it will be seen how a judicious interference by means of caustics, in this stage of the affection, sometimes leads to the most satisfactory results, so far as obtaining healing with little subsequent deformity.

Thirdly. The application of caustics is advisable, when the ulcerations arising from tubercular disease of the lymphatic ganglia are associated with still further mischief, and extensive and obstinate fistulæ result. In such cases, after the surgeon has thoroughly convinced himself of the exact condition presented by the complicated mischief, a careful use of the potassa fusa will be accompanied with decided benefit. If it be applied to the fistulous tracts, when they are lined with a thick semi-gelatinous membrane, and not associated with existing disease of a gland, the sanious and unhealthy secretion will be changed for one of a more truly purulent character, and be followed by contraction of the canals. If, in addition, the margins of the ulcerated surface be treated as lately advocated, the very best results will follow. In this way I have often succeeded in closing the most extensive and obstinate sores, and I prefer it to any other method.

But, notwithstanding this treatment, it will frequently happen, especially when the ulcerations are situated on the neck, that complete healing will not take place unless recourse be had to mechanical means. A momentary consideration affords the explanation. The skin covering the neck is closely associated with a thin plane of muscular fibres (the platysma myoides muscle), which, lying between the two layers of the superficial cervical fascia, extends from the lower portion of the face and jaw to the upper part of the chest. The action of the muscle, and its effects on the skin covering it, are obvious. In some persons its functions are more marked than in others. I possess very considerable control over the muscle situated on the left side of my neck, and can, at will, corrugate its fibres, and give it an apparent spasmodic action; but over its fellow I possess no voluntary control.

When, therefore, the skin and cellular tissue of the neck are included in scrofulous ulcerations of the character now under consideration, it will be found, unless the action of this particular muscle be paralysed, that constant motion, although of a partly involuntary kind, will prevent healing and cicatrisation. This undue influence may be counteracted by artificially staying the action of the muscle by means of paddings of cotton-wool, charpie, etc., skilfully adapted, and maintained in position by means of strips of sticking-plaister and a bandage. I have long been conversant with the advantages of this plan, but have only lately heard it publicly advocated. (Mr. Hilton's *Lectures on Rest*, etc., 1860.)

No matter what caustic is used, it must be the endeavour of the surgeon to procure the best possible results; and such cannot be obtained without due regard to the various practical hints which have been detailed.

In the management of this complicated form of ulceration, I have avoided all mention of the knife, because I believe that its application is generally inexpedient, and that the same end may be more surely attained by less severe measures.

Although I have insisted on the importance of local interference in the treatment of scrofulous ulcerations, still, lest I should be thought to have done so too urgently, I will again repeat that I cannot sufficiently recommend a hand in-hand resort to constitutional and topical means, for it is only by a judicious application of both that really satisfactory results can be obtained.

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* Mr. Hilton, in his late course of Lectures at the Royal College of Surgeons, on the subject of "Rest in connexion with the Treatment of Disease", showed how, by means of exploring the surface of an irritable ulcer with a sharp point, the exposed nerves might be readily detected.

[*To be concluded.*]

MEDICAL PSYCHOLOGY.

By Robert Dunn, F.R.C.S., etc.

[*Concluded from p. 275.*]

Phenomena of the Intellectual Consciousness. *To perceive* and *to think* are distinct mental acts; for perception, as we have seen, speaks to us from *without*, but intellection from *within*, so that the mental processes are here reversed. And while, on the one hand, all our immediate or intuitive knowledge has its origin in perceptive experience; so, on the other hand, all our representative knowledge is the creation or product of the mind's own intellection and introspection, of imitation, imagination, ratiocination, and reflection: for these, with memory and volition, are the distinguishing phenomena of the intellectual consciousness. It is through them that man is raised so immeasurably high in the scale of being above the brute creation, and that the human mind attains to its culminating phase of development in the highest reason, and the freest will. Rising above sensation, and above perception, man soars to the region of representative knowledge, grasping through his intellectual faculties and reflecting powers abstract ideas, and necessary and universal truths, and finding articulate utterance and expression for them through the noble faculty of speech, in language.

There are, as we have seen, instinctive intellectual intuitions, primitive beliefs, and primitive judgments; but, in the development of the intellectual consciousness, the imitative and imaginative faculties are the first to come into play, and to begin the work of abstraction. Man is from his cradle an imitative animal; and in the infancy of the race, in remote antiquity, he first sought to embody, through the imaginative faculty, his perceptive intuitions, his inward or mental images, and representative ideas, in the outward realities of nature, as their signs or symbols, and afterwards set himself to work, by means of his hands and with the chisel and the pencil, to mould, form and fashion images of those objects of nature, in which he had embodied his mental images and generalised ideas, and also to make pictorial representations of them. Such of old, were the winged bulls of the Assyrians, and such the hieroglyphics of the Egyptians; and thus, through the imaginative and imitative faculties, were sculpture and painting, however rude in their beginnings, his first step in the process of abstraction. For, until signs are employed, our mental images are not held clearly apart; they merge like dissolving views into one another. Our life in fact, without them, would be more like a dream than a waking reality, portions of a thousand different ideas perpetually combining with and melting into one another. But, when once symbolised or embodied in signs, our generalised ideas are no longer, but cease to be, mere subjective representations; for, being thrown into fixed and significant types, which perform, though imperfectly, the office of abstract ideas, they exist in the mind altogether apart from the region of immediate or inward experience, as independent intellectual realities; and, as such, become distinct and intelligible objects of contemplation and thought, which can be placed at pleasure either within or without the consciousness of the moment. But still man could not be said to have achieved his first step in the freedom of human thought, until, instead of objectifying his inward images in existing outward realities, he had, by his creative mental energy, produced, invented, and constructed his own sign, phonetic or visible, for the embodiment of the intellectual idea, "the sign for the thing signified." And this he has done in language, creating a new external world, and transferring into it the phenomena of his inner life. For "in language the sign, whether spoken or written, is objective. It appeals to the fears; it comes to us from the outward world, and is constructed from the elements of nature around us. At the same time it has no natural meaning, and contains no thoughts, apart from the mind which created or uses it. Its whole force consists in its being the embodiment of an idea; in brief, it is idea objectified." (Morell's *Psychology.*)

Now, constituted as man is, and endowed with the faculty of speech, his exclusive prerogative, it is as natural, when vividly affected, that he should give expression and find utterance, in articulate sounds, for his feelings, emotions, ideas, and thoughts, as that he should voluntarily use his locomotive powers in progression. It is true, that the scream of alarm, the shriek of horror, and the laugh of surprise, like the scowl of hatred, are natural signs, and not conventional ones, like articulate words. But having an instinctive apprehension of the gestures, cries, and other signs of natural language, he gradually ascended from these to the acquisition of articulate speech, by giving, step after step, conventional names to objects and actions, emotions and passions, generalisations and abstractions. Among all the races of man, the instinctive impulse is irresistible to give utterance in articulate sounds to the feelings, emotions, and thoughts; and not only to fix upon articulate sounds, or names, as representatives of his intuitive cognitions or conceptions of things, but also to find expressions for the different qualities and states of things. And thus to the natural language of inarticulate sounds, gestures, and actions, he first added the conventional language of signs, and afterwards, in the fulness of time, alphabetical writing and the invention of printing consummated the intellectual benefits derived from the noble prerogative of speech.

Language thus implies a train of thinking; it is the circulating medium of our thoughts, the minister of thought and its interpreter. But without ideation, without mental images and representative ideas, there could be no thought, and without thought language would cease. Still thought there may be, indeed thought there is, in the case of the unfortunate and uninstructed deaf mute, independent of and without language. Nay, without speech, man, by virtue of his perceptive and intellectual faculties, can observe objects, and mentally arrange, associate, and form them into groups. He can judge of their properties and qualities, compare them and even deduce inferences; but how weak and incomplete are these processes of thought when language is wanting! without the agency of words, how limited and contracted would be those of generalisation and abstraction! As an intellectual instrument, language is intermediate between perception and thought. We reproduce in speech the mutual relations of objects, the relations of our thoughts to objects, and the order and relations of our thoughts to themselves. Nevertheless words are purely conventional, they have no natural meaning of their own, and contain no thoughts apart from the mind which created and uses them. Written notional words are the symbols or representatives of objectified ideas, and all notional words belong to the region of representative ideas, after these ideas have attained their most general character; and although words cannot excite the feelings like a gesture, or warm the imagination like a picture, they are the indispensable machinery in the process of generalisation and abstraction. And "in this way it is that they serve to construct the more general outline of knowledge. Hence the wonderful power which words possess on the whole process of thought; hence the capacity they attain, after the teachings of experience have paved the way, for expressing the very essence of the things to which they relate; hence, too, their use in forming a broad platform, on which the results of all the lower processes of mind are plainly recorded, and from which we can commence those higher forms of mental activity, which give to reason its all but infinite range, and all but omnipotent force." (Morell's *Psychology*, p. 184.)

Words are, in fact, the final expression of that mental process, as well as the depository of its final results, consummated through the instrumentality of the faculty of language, by which knowledge becomes definite, exact, and communicable; and they enable us, through our reasoning and reflecting faculties, not only to judge explicitly, but also to frame a method by which our judgments may be articulately expressed.

For the constructive faculty of language, from its power of combining words together, enables us, as I have said, to express the mutual relations of objects, the relations of our thoughts to objects, and the order and relations of our thoughts to themselves; and thus, on the one hand, continuous speech becomes moulded step by step into a complete organ of thought; and on the other, a sentence or proposition in language becomes equivalent to a complete thought in psychology, meaning of course by this formal thought, in its logical acceptation, that is: "a distinct act of comparison between two terms, in which we apprehend the relationship that exists between them." In the development of the intellectual consciousness, the reasoning and reflecting faculties are the latest to be evolved, and the last to reach their maturity; they are the most distinguishing attributes of humanity, of "the being that looks before and after"; for, while the moral and religious intuitions are the sole prerogatives of man, and constitute an immutable distinction between him and the whole animal creation, it is through his reasoning and reflecting faculties that he sees clearly the bases upon which moral obligation rests, and that religion becomes to him "a reasonable service," and that his is an intelligent, voluntary, and cheerful dependence upon an all-perfect Being, infinite in wisdom, power, and goodness.

When the exalted, pure, and holy moral and religious intuitions and feelings are directed, guided, and strengthened by the dominating influence of the reasoning and reflecting faculties, then it is, that the true greatness of the human character is manifested and felt by others.

From observation and experiment, from the joint operation of the perceptive faculties and the reasoning and reflecting powers, result the creation of science, and the achievements of science. Mr. Morell has well observed, "The proper function of reason is to create knowledge or science. The understanding alone can never do this; it can analyse, distinguish, form concepts, construct propositions, weave them into arguments, perform, in a word, any formal process within the data furnished to it, but it can never go beyond the barriers of its own definitions. When, however, we grasp a truth by the power of reason, on the other hand, it implies far more than the attainment of a bare definition of it. It implies that we have penetrated to the centre; that we can trace its pedigree in the world both of matter and form; that we can regard it as one link in a connected chain, of which we are able to tell the antecedents, and to foretell the consequents; that we can recognise it, in fine, as a particular manifestation of some great and universal law, the operations of which we have learned to comprehend and apply." (Morell's *Psychology*.)

But, in the progress of science, we must not overlook the importance of the imaginative or inventive faculty; and I shall close this imperfect and brief survey of the leading phenomena of the mental states, by reiterating what I have elsewhere said on the relations of the imaginative and reasoning powers. "Out of the fanciful combinations and groupings of external nature, new conceptions are formed; and by the imaginative faculty, we are placed in scenes, circumstances, and relations, in which our actual experience has never placed us, and from which, in consequence, as new sources of thought, new conceptions arise. But, while these new creations may bear strongly the impress of the æsthetic and emotional character and tendencies of our minds, the highest efforts of the creative faculty involve equally the agency of the intellectual powers, of collocation, analysis, and comparison, to achieve their loftiest triumphs. And thus, while, on the one hand, ideality is dependent upon the intellectual powers for the development of its highest and sublimest flights; so, on the other, is the understanding indebted to the imaginative faculty for those ideal combinations and conceptions, which, independently of their artistic value and importance, are seen to be so operative in the common affairs of human life, suggesting those pictures of the future which are ever before our eyes, and are our animating springs of action, with those visions of enjoyment, never perhaps to be realised, and their prospects of anticipated evil, that often prove to be an exaggeration of the reality, prompting the investigations of science, that are gradually unfolding the sublime plan on which the universe is governed, and leading to a continual aspiration after those higher forms of moral and intellectual beauty, which are inseparably connected with purity and love."

"Every system of philosophy," to conclude in the words of Morell, "rests in God, as its highest idea and its final aim. To see the Divinity as the beginning, the middle, and the end of all things, is the culminating point of all human thought. Thus it is the goal, not only of providence, not only of redemption, but also of the no less divine laws of reason itself, that God should be all in all."

BENEFICIAL EFFECTS OF BELLADONNA AS A SEDATIVE IN EPILEPSY.

By William Sankey, Esq., F.R.C.S., Dover.

Catharine P. M'Kenzie, aged 5 years, came under treatment September 26th, 1860, suffering from epilepsy. The account given by her mother was, that from her birth she had been a remarkably healthy child till two years ago, when she was attacked with diarrhœa, which was allowed to go on for four or five weeks, producing great weakness. Soon after this, the first fit occurred; and for nearly three months she had two or three daily. These soon ceased, without medical assistance; and she got well, and continued so till the summer of 1860, when she was suddenly again seized with the fits, accompanied with loss of power on the right side. The fits continued increasing in spite of various modes of treatment, and became almost incessant day and night, with total loss of power in the limbs and muscles of the neck; but she still retained a degree of consciousness. The treatment consisted in purgatives and counterirritation by blisters behind the ears and nape of the neck, succeeded by various tonics and cod-liver oil; the bowels being kept regular by small doses of castor oil. The state of the poor little sufferer at this time appeared hopeless.

On December 27th, I prescribed one-twelfth of a grain of the extract of belladonna to be given three times a day, gradually increasing the frequency of the doses to every six and four hours. The effect was most decided; the fits, instead of recurring every hour or two, on the 1st of January only occurred once in twenty-four hours. The appetite was improved, and the digestion was good. As the beneficial effect of the remedy was now established, and the pupils were rather dilated, it was deemed proper gradually to lessen the frequency of the doses, which was done till only one dose was given in twenty-four hours. During this time, recovery went on steadily and progressively. On the 8th of March I last saw the patient, and was told by her mother that she had had no fits for the last two days, and for the four previous days only one each night, and that less in violence or duration. She is still unable to stand or walk, but has perfect use of her hands, and speaks tolerably well. I consider that time is now only required, with the assistance of exercise in the open air, etc., to complete the cure.

CASE OF APOPLEXY.

By D. R. McNab, Esq., Epping.

A robust labouring man had suffered about three years with frequent headaches, and had on one occasion "pitched suddenly forward" while at his work. One day, between 12 and 1 p.m., he was seized with violent pain in the head; and he left his fellow-labourer to go to a ditch, in which to bathe his head with the water. At dinner-time he lay down for a short time; but in the afternoon he tied some hay. At about 5 p.m., he gave up work, and attempted to walk home; he was, however, unable to proceed, and was taken in a cart. Just before he reached the surgery, he called out "Stop at the Surgery"; but, when I saw him there in the cart, he was quite insensible. He was taken on to his own house in the town, and continued insensible till he died, at eight o'clock the next morning. No hopes were entertained of his recovery from the appearances. The face was pale; the breathing like that of quiet sleep, but thoracic rather than abdominal; the pulse somewhat slower perhaps than natural, and soon becoming irregular. The whole body was inert as in sleep; but there seemed a consciousness of pain upon the application of mustard and at the prick of a lancet. The pupils were closely contracted; but the eye, when examined, kept continually rolling in a singular manner from side to side in the orbit.

At the *post mortem* examination, the dura mater was congested. The brain appeared as if bursting through the dura mater; both lateral ventricles were filled and distended with dark coagula. In the left ventricle, upon the thalamus opticus and the corpus striatum and on the opposite wall of the ventricle, there was a diseased pulpy mass of brain-like substance mixed with blood, which appeared to have burst through the lining membrane, and given rise to the hæmorrhage.

An American Professor. Professor Day (not he of St. Andrews) is just six and a-half feet high in his stockings. His weight is 310lb., and he measures seven feet in girth. He is the tallest and biggest man in the regiment, and is noted for his great strength as well as his huge proportions. He has been known to shoulder a 600. bale of cotton, and has frequently taken a whisky barrel by the chines, raised it at arms' length, and drunk at the bunghole. On one occasion he threw a mustang pony and his rider over a ten-rail fence. For this offence he was tried and convicted in the Circuit Court of Lauderdale county, and fined 500 dollars. This remarkable man is the youngest and smallest of seventeen brothers. His father is two and a-half inches taller than he is, but not so thick set. His brothers are taller, but none of them are so stout as the Professor. It is necessary to remark that his father has been twice married, and has eight children by his first wife and nine by his present wife. The Professor is the principal of the Marion High School, and is a learned man in every sense of the word. He is a master of six languages, and as a mathematician he has no superior. He is, besides, one of the best men living, and is noted for his good nature. He never had but one fight in his life, and then he killed a horse and nearly murdered a man.

Reviews and Notices.

Autobiography of the Rev. Dr. Alexander Carlyle, Minister of Inveresk; containing Memorials of the Men and Events of his Time. Pp. 576. Edinb. and London. 1860.

This work contains curious information concerning many medical men who flourished in Edinburgh and London about the middle of the last century. Dr. Carlyle was born in 1722, and died in 1805. He commenced writing the present work at the age of 79; giving as his reason, a resolution he had long formed to note down certain facts within his knowledge, that might be subservient to a future historian, if not to embellish his page, yet to keep him within the bounds of truth and certainty. He was enabled to do this with great accuracy, in consequence of the habit he had acquired of making short notes in a diary for many years. He has written with great vigour, eloquence, and point; and, as is well observed by the editor (Mr. Burton), the contemporary-like freshness with which he realises scenes over which long years, crowded with other recollections, had passed, looks like a phenomenon unexampled in literature. The publication of the work has been purposely delayed until the generation liable to be distressed by the outspoken experience and opinions of others, which it contains, had passed away.

It is in no way our intention to follow the life and adventures of Dr. Carlyle, as recorded in this volume. Though but the minister of a country parish in the immediate neighbourhood of Edinburgh, he mingled intimately with most of the remarkable men of his time, and was an eye-witness of several important events, such as the Porteous riot in Edinburgh and the battle of Prestonpans. He entered the University of Edinburgh as a student in theology in 1736, when the medical school was first rising into fame, the first Monro being Professor of Anatomy, and Dr. Sinclair Professor of the Theory of Medicine. The latter, he tells us, was the most eminent Latin scholar at that time, except the great grammarian Ruddiman. It would appear that living in Edinburgh was then wonderfully cheap, as there were ordinaries for young gentlemen, at fourpence a head, for a very good dinner of broth and beef and a roast and potatoes every day, with fish three or or four times a week, and all the small beer that was called for till the cloth was removed. In 1743, when he was a student in Glasgow, we are told that Dr. Johnstone was Professor of Medicine, and Dr. Robert Hamilton Professor of Anatomy. The former was very old, and died that year; and was succeeded by Dr. William Cullen, who had been settled at Hamilton. In those days there were but few students of physic in Glasgow University. Dr. Cullen and his successor, Dr. Black, with the younger Hamiltons, brought the school of medicine more into repute there.

In 1745, he went to Leyden, then the great resort of British students, where he lodged in the same house with Dr. John Gregory, from Aberdeen, afterwards the distinguished Professor of Medicine in Edinburgh, with whom he became very intimate.

"Gregory," he says, "when afterwards tried by the

> ardent spirits of Edinburgh, and the prying eyes of rivalship, did not escape without the imputation of being cold, selfish, and cunning. His pretensions to be more religious than others of his profession, and his constant eulogies on the female sex as at least equal, if not superior, to the male, were supposed to be lures of reputation, or professional arts to get into business. When those objections were made to him in Edinburgh, I was able to take off the edge from them, by assuring people that his notions and modes of talking were not newly adopted for a purpose; for that when at Leyden, at the age of twenty-one or twenty-two, he was equally incessant and warm on those topics, though he had not a female to flatter, nor ever went to church but when I dragged him to please old Gowan. Having found Aberdeen too narrow a circle for him, he tried London for a twelvemonth without success; for, being ungainly in his person and manner, and no lucky accident having befallen him, he could not make his way suddenly in a situation where external graces and address go much further than profound learning or professional skill. Dr. Gregory, however, was not without address; for he was much a master of conversation on all subjects, and, without gross flattery, obtained even more than a favourable hearing to himself; for, never contradicting you at first, but rather assenting or yielding, as it were, to your knowledge and taste, he very often brought you round to think as he did, and to consider him a superior man. In all my dealings with him—for he was my family physician—I found him friendly, affectionate, and generous." (P. 179.)

In 1758, being in London, Dr. Carlyle became intimate with Dr. Pitcairn, who, he says, was a very handsome man, a little turned of fifty, of a very gentlemanly address. When he settled first in London, he was patronised by an Alderman Behn, who being a Jacobite, and not doubting that Pitcairn was of the same side, as he had travelled with Duke Hamilton, he set him up as a candidate for St. Bartholomew's hospital. During the canvass, the alderman came to the doctor, and asked him with impatient heat if it was true that he was the son of a Presbyterian minister in Scotland; which Pitcairn not being able to deny, the other conjured him to conceal that circumstance like murder, otherwise it would infallibly blow them up. He was elected physician to that hospital, and soon rose to great business in the city.

> "Dr. Pitcairn was a bachelor, and lived handsomely; but chiefly entertained young Scotch physicians who had no establishment. Of those, Drs. Armstrong and Dickson were much with him. As our connexions drew Robertson (the historian) and me frequently to the city, before my sister's house was ready, by earnest invitation we both took up our lodging at his house. We never saw our landlord in the morning, for he went to the hospital before eight o'clock; but his housekeeper had orders to ask us at breakfast if we intended to dine there, and to tell us when her master was expected. The doctor always returned from his round of visits before three, which was his hour of dinner, and quite happy if he found us there. Exactly at five his chariot came to the door to carry him out on his afternoon visits. We sat as long as we liked at table, and drank excellent claret. He returned soon after eight o'clock; if he found his company still together, which was sometimes the case, he was highly pleased. He immediately entered into our humour, ate a bit of cold meat, drank a little wine, and went to bed before ten o'clock. This was a very uncommon strain of hospitality, which I am glad to record, on repeated trials, was never exhausted. He lived on in the same manner till 1782, when he was past eighty; and when I was in London for the last time, he was then perfectly entire, and made his morning tour on foot. I dined once with him at that period in his own house, with a large company of ladies and gentlemen, and at Dr. Hamilton's, his cousin, of St. Martin's Church, on both of which occasions he was remarkably gay. He survived for a year or two longer. Dr. David Pitcairn, the son of his brother the major, who was killed early in the American rebellion, was heir both of his fortune and professional merit." (Pp. 334-5.)

Of Dr. William Hunter, we are told the following:—

> "There was a club in London where Robertson and I never failed to attend, as we were adopted members while we stayed in town. It was held once a week, in the British Coffee-house, at eight o'clock in the evening; the members were Scotch physicians from the city and west end of the town. Of the first set, were Pitcairn, Armstrong, Orme, and Dickson; of the second, were William Hunter, Cliphan, Mr. Graham of Pall Mall, etc.—all of them very agreeable men; Cliphan, especially, was one of the most sensible, learned, and judicious men I ever knew, an admirable classical scholar and a fine historian. He often led the conversation, but it was with an air of modesty and deference to the company, which added to the weight of all he said. Hunter was gay and lively to the last degree, and often came to us at nine o'clock fatigued and jaded. He had no dinner, but supped on a couple of eggs, and drank his glass of claret; for, though we were a punch club, we allowed him a bottle of what he liked best. He repaid us with the brilliancy of his conversation. His toast was, 'May no English nobleman venture out of the world without a Scottish physician, as I am sure there are none who venture in.' He was a famous lecturer on anatomy. Robertson and I expressed a wish to be admitted one day. He appointed us a day, and gave us one of the most elegant, clear, and brilliant lectures on the eye that any of us had ever heard. An instance I must set down of the fallacy of medical prediction; it was this: Dr. Hunter, by his attendance on Lady Esther Pitt, had frequent opportunities of seeing the great orator, when he was ill of the gout, and thought so ill of his constitution, that he said more than once to us, with deep regret, that he did not think the great man's life worth two years' purchase; and yet Mr. Pitt lived for twenty years, for he did not give way to fate till 1778." (Pp. 345-6.)

At p. 351, a curious anecdote is related of Dr. Armstrong, who, dining in company with Sir David Kintock and others, was asked if he thought of recommending the waters of Barège to the baronet? whom he was then attending. "No," replied the crusty doctor; "we never thought of prescribing it, as we knew that he was such a coward that he would rather be dammed by a fistula than cross the Channel in a packet-boat, especially in time of a French war." Sir David, having his pride irritated by this attack, did go to Barège, and recovered.

In 1764, Dr. John Gregory, his Leyden friend, came to settle in Edinburgh, a widower, with three sons and three daughters.

> "He soon came to be perfectly known here, and got into very good business. Dr. Rutherford, Professor of the Practice of Physic, beginning to fail, and being afraid of Cullen becoming his successor, whom he held to be a heretic, he readily entered into a compact with Gregory, whom he esteemed orthodox in the medical faith, and resigned his class to him. In a year or two that doctor died, when Cullen and Gregory, agreeable to previous settlement, taught two classes the theory and practice by turns, changing every session. I got Gregory elected into the Poker (a convivial club); but, though very desirous at first, yet he did not avail him-

self of it, but desisted after twice attending, afraid, I suppose, of disgusting some of the ladies he paid court to, by falling in sometimes there with David Hume, whom they did not know for the innocent good soul which he really was. Professor Fergusson told me, not long ago, that he was present the second time Dr. Gregory attended the Poker, when enlarging on his favourite topic, the superiority of the female sex, he was so laughed at and run down that he never returned." (Pp. 460-61).

Although we have confined ourselves to the medical portions of this work, the whole of it abounds in anecdote and description of men and manners that will not only amply repay perusal, but prove a charming relaxation from professional toil.

The Anatomist's Vade Mecum: A System of Human Anatomy. By Erasmus Wilson, F.R.S. Eighth edition. Pp. 732. London: Churchill. 1861.

This valuable manual of anatomy has long ago passed beyond the reach of criticism. It is the established text-book both of the student and of the practitioner. We have no doubt that the present edition is brought up to the level of this day's anatomical knowledge; but we cannot pretend, by personal investigation of every line of the book, to guarantee the fact. The author tells us that he is aware "we live in a competitive age, and that it becomes us not to be content with what we have already done, but to strive to attain as nearly to perfection as the bonds of human fallibility permit"; from which statement we may safely infer that Mr. Erasmus Wilson has done his best to work up his excellent little volume to the wants and requirements of the student of 1861. Some new engravings have been added to this edition.

A Manual of Qualitative Analysis. By R. Galloway, Professor of Practical Chemistry in the Museum of Irish Industry. 3rd Edit. Pp. 246. London: 1861.

The author has, in this new edition of his very useful manual, made several additions; and in these stirring days of science, he could hardly have done otherwise. He has introduced the photo-chemical methods of Cartnell and Bunsen, and also Bunsen's paper on his blow-pipe experiments. He has likewise given various methods for the separation of the phosphates and oxalates precipitated by ammonia. A guide to his manipulations is as necessary to the chemical student as is a manual of anatomy to the anatomical learner; and such a guide is this volume. That our author has produced such a manual as right well answers its purposes is proved by the fact, that we have now to announce a third edition of it. Books of this kind are not bought to amuse us in our "hours of idlesse," but for *use*.

M. Heller. The French Academy of Medicine has lost one of its oldest members; the only one, probably, whose nomination now dates from the foundation of the Society. M. Heller, says the *Moniteur des Sciences*, was an old republican (*de la veille*), he remained a republican of the morrow (*de la lendemain*), and what is still more strange, he continued republican to the last (*de la surlendemain*). An enemy to intrigue, and careless of honours, he lived as a philosopher, and died undecorated, after having been a member of the Academy for forty years.

DR. BROWN-SEQUARD'S

GULSTONIAN LECTURES

ON THE

DIAGNOSTIC VALUE AND MODES OF PRODUCTION OF THE VARIOUS SYMPTOMS OF DISEASES OF THE BRAIN.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY, 1861.

Dr. Brown-Séquard's sixth and last lecture was delivered on Friday, February 22nd. In it he continued the description of the symptoms attending lesions of various parts of the encephalon.

If we attempt to judge of the presence of lesion of the *cerebellum* from the interference with what are supposed to be its functions, we shall find ourselves at a loss. In fact, if we were to hasten to draw a conclusion from pathological observation, we might infer that there is no organ which has so little to do as the cerebellum. In many instances where the greater part, or even the whole, of this organ has been destroyed, or has been absent from arrest of development, the only symptom observed has been a weakness of the movements of the muscles. Cases of this kind have escaped the notice of those who have built up hypotheses as to the function of the cerebellum; such as that it directs the muscular movements; or that it acts on the genital system; or that it is the organ in which sensation is perfected; or that it is the seat of the muscular sense. All these views are opposed by many pathological facts. The lecturer here took occasion to observe, referring to what he had said at the end of the preceding lecture regarding hypotheses, that while, on the one hand, hypotheses were often useful, on the other hand, the persistence of the notions regarding physiology of the cerebellum is an instance of the difficulty of removing them, when once formed, from the mind, in spite of their being proved to be incompatible with known facts.

There is, then, not much that is precise to be learned from the disturbance of definite functions as to the presence of injury of the cerebellum. But, among the various symptoms observed, there is one of rather frequent occurrence—a degree of disorder in the direction of muscular action. What is the cause of this? The real cause of the symptoms lies probably in irritation of the pons Varolii; this may be inferred from a consideration of the symptoms in the class of cases now referred to, and from the observation of other cases. The pons contains the voluntary motor fibres, as well as a number of other fibres which, probably by reflex action, exercise an influence over muscular movement. A tumour in the cerebellum, then, if it press on certain of the fibres in the pons, will give rise to reflex phenomena; and, if it press on the fibres sent to muscles, will produce disorder in their action. The symptoms may, also, in some degree be dependent on the production of a reflex action on the nerves of the blood-vessels in the pons. The idea appears supported by the fact that, in some cases where the same disorder of muscular movements has been observed, the cerebellum has been found quite free from lesion, and the disease has been seated in the anterior cerebral lobes. A study of the cases in which disorder of the muscular movements is observed, will almost always lead us to trace the disorder to implication of the pons Varolii.

There is another remarkable symptom attending disorder of the cerebellum, which illustrates the influence exerted by one part of the encephalon on another; namely, amaurosis, which is often met with in cases of inflammation or tumour of the pons Varolii, or where there is hæmorrhage in this part. What is the connection between the cerebellum and the eye? It may be, that a tumour in the anterior part of the pons has pressed more or less on the tubercula quadrigemina, where there are fibres of the optic nerves. But, in most of the cases, the disease has been situated quite at the back part of the cerebellum, or in one of the crura cerebelli, where it could not irritate the roots of the trigeminal nerve. The amaurosis in these cases can only be explained by the hypothesis of reflex irritation. It generally occurs on the same side as the structural lesion; but not always. Both eyes are often thus affected, though but one-half of the cerebellum is diseased; and, on the other hand, when the lesion is seated at the middle of the cerebellum, one eye only may be amaurotic. The amaurosis is remarkable for its transient nature; appearing, and often disappearing, quite suddenly. All this points to its dependence on reflex irritation, acting on vaso-motor nerves.

Cases of crossed atrophy of the encephalon, in which the cerebrum has been affected on one side, and the cerebellum on the other, have been published by Dr. J. W. Ogle, R. Smith, Schroeder van der Kolk, and others. In these instances, which was the part first attacked? Most likely the cerebellum; and the brain became affected in a secondary manner. The paralysis of the body is on the opposite side to that on which the cerebrum is diseased; and these cases thus afford another negative to the hypothesis which assigns to the cerebellum the duty of regulating muscular motion. Disease of the cerebellum is sometimes also attended with irritation of the genital organs. Sometimes, too, as is shewn by experiments on animals, suppuration is produced by irritation of the crura cerebelli.

When there is disease at the base of the *tubercula quadrigemina* (*i.e.*, at the part next the brain), amaurosis of a persistent character is produced; and it occurs in the eye of the opposite side to the seat of the lesion. Chorea has been known sometimes to attend disease of these bodies; as has also rotatory motion.

The symptoms of disease of the *crura cerebri* are very similar to those which accompany lesion of the upper part of the pons Varolii; but the third pair of nerves are affected—and sometimes the fourth pair, when the tubercula quadrigemina are also affected. Injury of the third pair may be expected whenever the crura cerebri are injured at the lower part. If the lesion be seated in one-half, but at the point of decussation of the third pair, there is paralysis of the muscles of both eyes; if it be above the decussation, then the opposite eye is paralysed, and the pupil is dilated.

The *corpora striata* have been by many physiologists regarded as the centres of voluntary movements, and the *optic thalami* of sensation. But injuries of these parts are sometimes attended by no symptoms, sometimes by symptoms opposed to the hypothesis to which reference has been made. For, occasionally, the corpus striatum of one side is destroyed without any loss of voluntary power; or the optic thalamus without impairment of sensation. Voluntary and sensory fibres do not then pass to these parts in a continuous manner, so as to render them the special centres of the functions; but, as Dr. Todd has suggested might be the case, communication is probably maintained between one side and the other by means of the nerve-cells.

The ordinary symptoms of disease of the corpora striata and optic thalami are almost always in the form of paralysis of motion, or anæsthesia; arising either from pressure on the crura cerebri or pons Varolii, or as reflex results from irritation. The diagnosis of disease of these structures is difficult; but we may arrive at it in some cases by observing that the paralysis is not attended by disorder of the mind, and that there is no indication of interference with the posterior parts of the encephalon, such as would be indicated by paralysis of the organs supplied by the nerves proceeding from the pons Varolii and medulla oblongata. If there be much diminution of sensation in the paralysed limb, the injury is more probably seated in the optic thalamus than in the corpus striatum.

As to the remaining parts of the brain, we are in the dark regarding the symptoms by which their disease is denoted. All that has been said about the special connexion of the *anterior lobes* with speech, and of the *posterior lobes* with sensation, is entirely without foundation. The symptoms of lesions of the anterior and of the posterior lobes are uncertain in their occurrence. There are some nerves which pass below the anterior lobes; and if the function of these be impaired, while there is also loss of speech, the anterior lobes may be looked on as the seat of the injury. The same conclusion may be arrived at when there is fixed pain in this part, or discharge of pus or blood through the nostrils.

The *middle lobes* are often implicated in cases of disease of the ear as a result of sympathy of action—not from direct communication.

The lecturer now proceeded to the examination of various symptoms of disease of the brain.

When *epilepsy* is present in conjunction with symptoms of cerebral disease, we must almost always look on the membranes as the seat of the lesion. Disease of the pons Varolii and of other parts at the base less frequently produces epilepsy than does disease of the upper parts, especially when the dura mater is affected; disease of the dura mater is very commonly the cause of epilepsy. Referring to the hypothesis that, when an epileptic fit is arrested by the application of a ligature to the limb in which the aura is felt, an obstacle to the passage of the nervous force is produced, Dr. Brown-Séquard observed that he had lately had opportunity of ascertaining that, when the epileptic aura proceeds from the whole of one side of the body, the application of a ligature to one limb alone is enough to prevent the attack. There must therefore be another explanation than that of cutting off the nervous action. Most probably the ligature produces an irritation which counteracts the epileptic tendency. Following out this idea, he had succeeded, by applying a blister round the arm, not only in warding off the epileptic attack, but in preventing the aura for six weeks in a man who previously had had fits every day. Certainly, then, an irritation of the limb in which the aura is felt will succeed in keeping off the attack for a time; but for how long a time is not as yet determined.

The lecturer would not say much on the important subject of *insanity*, which may attend any lesion of the brain proper or its membranes; but there was a remarkable fact to which he must draw attention. Baillarger has published a number of cases (above thirty) of cure of general paralysis. The cure sometimes has taken place after the appearance of a few boils. Here, then, we meet with almost sudden disappearance of a symptom generally connected with structural disease of the brain; and we cannot but admit, therefore, that it does not always proceed from that cause.

Dr. Brown-Sèquard now proceeded to review briefly the therapeutic applications of the views he had brought forward.

Since we are aware that all the symptoms of disease of the brain may occur without actual lesion of this organ, but may be the result of irritation, or of alterations in the quantity or quality of the blood, it becomes our duty, when these symptoms are present, to examine well the state of the circulation, of the nutritive processes, of the mucous membranes, skin, etc.—in fact, every organ and function, so as to detect the external cause, if there be one. This examination is the more necessary, because on the detection of the cause must depend the treatment adopted. If, for instance, the symptoms apparently indicating venesection owe their origin to the presence of worms or to impoverished blood, in such cases the withdrawal of blood will, of course, do harm, and not good.

If, in treating a patient for disease of the brain, he do not improve, it is well to try carefully a change to other treatment, especially tonics. When there is apparent poverty of the blood, the indication is obviously to improve the quality of this fluid; and, if there be reason to suspect the presence in it of some poison, such as mercury, means must be taken for the elimination of this.

With regard to the prognosis, it is of much importance to be able to determine what chance of recovery the patient has; and this is only to be found out by interrogating each organ. If this be neglected, the prognosis may often be unnecessarily unfavourable.

Some points of treatment applicable to cases where the symptoms depend on reflex irritation were now noticed.

If a child have hemiplegia, with great irritation of the nostrils and dilated pupils, it is almost certain that worms are present; and the proper treatment for these will be attended by a chance of success.

A man has ptosis, with local anæsthesia in various parts of his body, frequent giddiness, and perhaps a few epileptic attacks occurring at long intervals; he has also much pain in the head, especially at night. There is no history of syphilis, so far as can be learned by interrogation, or by examination of the throat, skin, and bones. Such a case is perplexing; nevertheless, the treatment which benefits syphilis is often of utility here also—iodide of potassium, and perhaps mercurials. Dr. Brown-Sèquard had seen at least six instances of the kind; but at the same time he had failed in producing any effect from the same treatment in many other similar cases.

In a case of scurvy, also, presenting symptoms of brain-disease (as has been described by Tholozan and others), the treatment must be directed to the scurvy; and, in a word, the treatment of the symptoms of disease of the brain must be directed by the general condition of the patient.

British Medical Journal.

SATURDAY, MARCH 23rd, 1861.

PALÆONTOLOGY: ITS LESSONS.

A short time ago, palæontology* was a term unknown to modern dictionary-makers; few even of the educated classes of society had made acquaintance with it. Yet the subject of which it treats has already attained the proportions which entitle it to assume the high position of a science. This science, then, is wholly one of modern growth; but it has grown with wondrous vigour, and has already produced fruit of the highest and most valuable kind. Its business is to deal with the petrified and fossil remains of plants and animals, chiefly of extinct species; and in this way it has become the right hand of the geologist. As Mr. Owen says, geology has "left her old handmaiden mineralogy, to rest almost wholly upon her young and vigorous offspring, the science of organic remains". Physiology and zoology, again, have been extended and aided by the science; and so also has that branch of geographical science which treats of the configuration of the earth in other days.

But far beyond these special sciences has the influence of palæontology reached. It has opened a dark path into that problem of our nature which has in all ages occupied the thoughts of the highest intellect, and been a source of the deepest interest to every man; viz., his origin—his wondrous advent upon earth. Astounding, indeed, are the facts which it has revealed to us of the earth's condition, and of the phenomena in operation upon it, at periods so vastly remote that the mind wearies under effort of thought in attempting to reach them.

This much, however, palæontology surely tells us: it shows with the finger of demonstration that the globe has revolved in its orbit, as it revolves now, through countless myriads of ages; that the sun has imparted its beneficent warmth from the inconceivably remote period of the Cambrian rocks; that showers have fertilised the land, and tidal waves washed its shores; and that winds and storms have agitated and rippled the ocean's surface; that through these immense bygone epochs the world has teemed with life, and that by the side of life has ever marched the spectral figure of death, playing his part then as now.

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* Palæontology; or a Systematic Summary of Extinct Animals and their Geological Relations. By Richard Owen, F.R.S. Edinburgh: 1860.

> "At no period does it appear", says Mr. Owen, "that the gift of life has been monopolised by contemporary individuals through a stagnant sameness of untold time, but it has been handed down from generation to generation."

Species, too, have perished, like the individuals which composed them; but, as regards the various forms of life, from one epoch to another later, one unceasing stream of "progress" is marked.

> "The most important and significant result of palæontological research has been the establishment of the axiom of *the continuous operation of the ordained becoming of living things.*"

Such are the extraordinary facts demonstrated by this science, when its details are read and explained by the master-minds who have reared it into a compact structure. But one fact above all others is of intense interest to us; and it is that which refers to the fate of different species. How do species arise? How do they become extinct? Our readers know what a wide field this question has opened to the theorist. Buffon has had his say about it; Lamarck's fanciful ideas have amused us; and, in later days, pseudo-men-of-science, who have never learnt to steady their imagination by the labour of patient study and the long and sober investigation of details, have captivated the public mind by their ill-regulated discursions into the vestiges of creation. What has the philosophic mind of the genuine philosopher to tell us on the subject? Strange—is it not?—that the speculatist with a free pen and a fertile imagination should rush with unhesitating haste into the very heart of this deep mystery, and gather from his superficial review of facts a clear and lucid explanation of it—satisfactory to himself, and to half the world besides!

But what a different tale is told by the judgment of the philosopher, sobered by a life of deep study of the elements of palæontology! See how little he possesses of the glib trick of the chamber theorist, who thus deludes an unknowing public by the clever assumption of the philosopher's garb and the philosopher's voice! "On the problem of the extinction of species little, demonstratively, can be said; and on the more mysterious subject of their coming into being, no light has yet been thrown by experiment or observation." Such is Mr. Owen's conclusion. Something we can see, guided by the light of modern researches and of palæontology, of the manner in which species die out and perish away as living beings from the earth; but philosophy has as yet told us nothing concerning the method of the introduction of new species. The observed causes of the extirpation of species point, Mr. Owen says, to slowly operating geological causes, whereby the due sustenance of the animals has been affected; there is nothing to show that they have been suddenly destroyed by any grand and exceptional cataclysmal changes. Extinction, therefore, under these slow climatal changes, shows in this case at least rather a want of that self-adjusting power in individuals of which some writers make so great account. Of the fact of the extinction of species by climatal agency we possess facts which have been witnessed within our own time. What Mr. Owen calls "the spectral appearance of mankind" on earth can, at all events, have had nothing to do with the extinction of species prior to his existence.

Mr. Owen relates the different hypothetical transmuting influences which have been suggested as causes of the change of one species into another; and he says of them, that no observation of their effects in changing any known species into another has yet been recorded.

> "Past experience", he adds, "of the chance aims of human fancy, unchecked and unguided by observed facts, shows how widely they have ever glanced away from the golden centre of truth."

The general conclusion deduced from a large array of facts is, in Mr. Owen's view, dead against the doctrine of the uniformitarian.

> "Organic remains, traced from their earliest known graves, are succeeded one series by another to the present period, and never reappear when once lost sight of in the ascending search. The sum of the animal species at each successive geological period has been distinct and peculiar to such period. . . . And"—happy conclusion!—"there has plainly been 'an ascent and progress in the main'."

The origin of species, therefore, as far as science can tell the tale, is enveloped in the deepest obscurity. We see mammalia appear upon the stage at a comparatively recent period of the world's history; and man himself, the latest of all comers, as Mr. Owen puts it, walks forward like a spectre on the earth. Where are the traces of the transmutations of these mammalia? Where are the faintest scientific glimmerings of the transmutations by easy stages from the lower kinds up to man himself? The links are utterly wanting. Science is dumb.

Does not, we cannot but suggest, science, so often falsely reviled as the enemy and discreditor of revelation, here step in and in a most surprising way second its assertions? Mr. Owen sees (and, till a better than he come, Mr. Owen will be our guide in this direction) in these wonderful records of the past ages of the world demonstrative proof not merely of the passive, uniform, and quiescent presence of an *anima mundi*, but of an active and anticipating intelligence. We find new species springing, like those fabled creatures of the poet, from the earth—fresh creatures, we may call them—as we pass along through this wonderful journey into the past; and for such creations we must presuppose the existence of an intelligent and all-powerful Creator. There is nothing in all this of that benumbing philosophy which coldly sees the earth projected into its orbit, its matter gifted with certain forces, and then left to fructify by the virtue of those inherent forces alone. We have before us the proof, as it were, of the interfering agency of the Creative Spirit; and thus deduce from these dry bones and fossil records the truth of the belief which is somewhat a part of our very nature—that there is a Divinity which shapes our ways, constantly stirring and ever active around us. We have also the demonstration that this "beneficent intelligence, which manifests His power in our times, had also manifested His power in times long anterior to the records of our existence". This height no preceding philosophy has attained.

One other lesson this great teacher—palæontology—bids us reflect upon; viz., the finality of races.

> "There seems to have been a time", Mr. Owen says, "when life was not; there may therefore be a time when it will cease to be. . . . But the guide-post of palæontology points but a very short way; and in leaving it we find ourselves in a wilderness of conjecture, where to try to advance is to find ourselves 'in wandering mazes lost'."

We see

> "That the phenomena of the world do not succeed each other with the mechanical sameness attributed to them in the cycle of the Epicurean philosophy; for we are able to demonstrate that the different epochs of the earth were attended with corresponding changes of organic structure; and that in all those changes the organs were exactly those best suited to the functions of the being. Hence we not only show intelligence evoking means adapted to the end, but at successive times and periods producing a change of mechanism adapted to a change in external conditions. Thus the highest generalisations in the science of organic bodies, like the Newtonian laws of universal matter, lead to the unequivocal conviction of a great First Cause, which is certainly not mechanical."

THE USE AND THE ABUSE OF A THING.

We have read with much pleasure a spirited lecture on Ale, Wine, Spirits, and Tobacco, delivered by Dr. John Barclay before his fellow-townsmen at the Leicester Literary Society. We agree thoroughly with the lecturer in the view he takes of teetotalism. He has hit the right nail on the head. No chemistry or exalted philosophy can destroy man's instincts; and it is useless attempting to deny that the human race has an instinctive desire for fermented liquors, or to suppress the appetite for them. A life of teetotalism is a sort of conventual mode of combating sin. The old Adam will still assert his presence in the flesh. *Naturam expellas furcâ*, etc. If it come to this, that we are not to indulge our appetites, because we indulge them to the extent of abusing them, we must shut up existence altogether; for which of our appetites is there which is not daily sinned against? Who, indeed, sins more against the laws of the gastronomic appetite, for example, than the veritable teetotaller himself? Dr. Barclay has well brought out this point. He who takes no sack for his drink is decidedly apt to eat a glutton's allowance of solids. If chemistry and its crucibles, and physiology and its revelations, say that spirits are not nourishment, they must be sent back to school to learn their lesson better, for they come with a *reductio ad absurdum* in their hands. No counterblasts, either regal or philosophic, will put down spirituous drinks. If the apostles of teetotalism could annihilate that particular gift which Nature has of turning sugar into alcohol—in fact, could destroy those germs which, according to M. Pasteur, are the promoting agents of the alcoholic fermentation—they might have a chance of success in their teachings; but, until they have arrived at the arrestment of this generative law, we must be excused for doubting of their putting an estoppel on spirits and wine, or of robbing a man of his beer. Man, as we understand his position, was placed on earth to combat sin and his evil passions. If he had no temptations to deal with, he would have no combat to fight. By all means try to stop the horrible abuses made of drink; but, in doing so, don't confound use and abuse. If we are to put down spirits because men through drinking commit gross abuses, we must, to be logical, put down every human passion and instinct. The warmest affection, love, must be suppressed, because men abuse the passion. Even religion itself must be given up; for does it not drive men into lunatic asylums and all sorts of crimes, when they get maddened with it? Meat and bread, too, and turtle-soup, we must abhor; for do not men abuse these things?

No, no. The right way to cure this curse of drinking is to elevate our drinking countrymen from their brutal state; and there is no better way of doing this than by giving them the instruction which Dr. Barclay has here done so well. This, indeed, was the special point which, in noticing his pamphlet, we wished to illustrate by it. We firmly believe that our medical brethren throughout the country, by following Dr. Barclay's example, would do more towards the annihilation of quackery, and towards improving the minds of the masses, than could be done by volumes of learned refutations of Herr Hahnemann's peculiarities or Mesmer's tricks, or spasmodic attempts at establishing teetotalism. The offer now held out by the Government through the Science and Art Department may, we hope, induce some of our younger brethren to take up this lecturing matter in earnest. The prince of lecturers in this country, Michael Faraday, is not ashamed to bring down his high intelligence to discourse on chemistry with the babes and sucklings of science;

and why should men of our profession think they are lowering their dignity by engaging in the excellent work of instilling truth and wisdom, as evinced in the physical world, into the minds of the hard-fisted mechanic or the half-educated higher classes? Few men of our generation have probably diffused more general good in this way than our associate Dr. Lankester. We offer his doings in this direction as an example of what may be effected to a good purpose by general diffusion of knowledge. "A professor of one of our ancient universities," as Sir B. Brodie told the Royal Society, "and a distinguished Fellow of the Linnæan Society, does not consider it to be incompatible with his duties as a parish priest, nor beneath his dignity as a philosopher, to give such simple instructions in botany to the girls of the village in which he resides as may enable them to understand the flora of the neighbouring district."

A GREAT SOCIETY: ITS DEFECTIVE ORGANISATION.

A few weeks ago we commented on the pitiable want of attention which was shown by our great Royal Medical and Chirurgical Society to medical questions of high national importance. We must again repeat, that this chartered seat of science does not perform its proper functions. It is over lucky, and lazy, as from plethora. Instead of being, as it ought, a kind of assay-office, where the real value of the facts brought before it may be tested and elicited; instead of stamping with its mark and authority the various vital questions of the sort referred to, it has become little more than a scientific register-office, where opinions and facts are entered, duly endorsed, red-taped, and put in a pigeon-hole. To us, it seems as clear as the day, that this embodiment of the professional voice, if it fulfilled its functions rightfully, would be an apparatus for definitively settling, as far as human science can settle, all the fluctuating medical questions of the day. It has funds abundant at its service. It has men of the highest mental calibre in every department of our art, in physiology, in medicine, in surgery, in chemistry, at its beck—men ready and willing to throw their energies into the investigation of any disputed or ill-ventilated subject. But of all this fine material it makes no use; and simply because of its defective organisation, so often and so well pointed out by Mr. Charles Hawkins.

We have already referred to the miserable state of obscurity in which the Society has left the question of suspended animation from drowning. Here, again, is another topic urgently requiring authoritative supervision—the Hot-air Bath—an instrument evidently of the highest powers for effecting good or evil, or both—and our Society lets the thing go its way in the world unguided and unchecked. The public and the professsion want to know how they are to deal with this new instrument, and our authority is dumb! The injury which this neglect of its duties inflicts on the profession is incalculable. It encourages quackery; and give us no just excuse to exclaim against the appropriation of these neglected things by quacks. In this very case, the Society, while calmly looking on, will probably witness the elevation (by some glorious Oriental quack) of a magnificent establishment—the Turkish Calido-Frigidarium—where the cure of every disease that afflicts the human body will be taken into consideration. Ours is indeed a country of free trade and *laissez faire.* Surely, in these sceptical days, when drugs are so scurvily treated, and the most divine of remedies (as Guy Patin called it) treated as the worst of enemies, an energetic sudatorial appliance, like this Turkish Bath, is worthy of having its *status* properly fixed in our chapter of therapeutics. And we let the quacks and thermaturgists take possession of it! *Et sic omnia!*

THE WEEK.

The Lord Chancellor's Bill affecting lunatics under Chancery supervision has passed a second reading in the House of Lords. The Bill, as we understand, provides, among other things, for the creating of visiting Commissioners, and also for the granting of pensions to two of the present Commissioners, who are on the point of retiring from office, after having performed their duties for about thirty years. Three new Commissioners are, we believe, to be appointed—two medical, and one legal. The salary attached to each office is £500 per annum, and travelling expenses. The Commissioners are not obliged to give up their professional pursuits, but may, when not engaged in the special visitation of lunatics, exercise their faculties as they please. Lord Shaftesbury, as we think, very wisely took exception to this part of the scheme. A medical man who gives up, say, four months of the year to the visiting of lunatics scattered anywhere between the Land's-end in Cornwall and John o'Groat's House, virtually gives up his private practice—at least, we may very safely assume that his patients will, at all events, give him up. If so, then it is scarcely to be expected that my Lord Chancellor can buy first-rate medical services at the price he tenders for them. The General Commissioners of Lunacy have adopted a much wiser course. They make their Commissioners give up all other pursuits from which profit is derived, and pay them handsomely as a compensation. In this way, they secure the entire services and undivided attention of each one of their Commissioners, to the manifest advantage of the Commission.

The London College of Physicians considers itself bound, in the interests of its members, to explain to the governors of the medical charities of the country the chops and changes which have been, during these latter days, introduced into its regulations. The licentiate of other days (it points out to the aforesaid authorities) corresponds to the member of this day; and the idea involved in the licentiate of modern date differs from that which hung around his predecessor, the college license holder. Whether the governors of our hospitals, etc., will go to school again on these complicated topics, we cannot tell; but at any event, the College has certainly only acted with its usual honesty and straightforwardness in openly declaring the relative positions of the tripartite practitioners of medicine who are now gathered together under the shadow of its remarkably gloomy portals in Pall Mall.

We are very pleased to register facts of the following nature. This is the way to put down quackery in its multiform guises. Quackeries, whether mesmeric or homœopathic, thrive through the ignorance of mankind. Therefore, *sublatâ causâ, tollitur effectus.*

> "At a meeting held in the public hall, Leamington, on Tuesday evening, resolutions were passed approving of the conditions of aid given by the Department of Science and Art, in assisting science instruction through the means of evening classes. The meeting was addressed by Dr. Jeaffreson, Mr. Buckmaster (of the Science and Art Department), Dr. Hitchman, Mr. Hawley, and other gentlemen; and classes will be established in connection with the Young Men's Association."

Referring to a note in this Journal, which stated that the London College of Physicians exacted a curriculum of four years from candidates, instead of three, as required by the College of Surgeons and Apothecaries' Hall, the *Dublin Medical Press* writes:—

> "The London College deserves credit for this attempt to improve the general practitioner, and we hope it may counteract the speculations of dealers in qualifications, who would 'lower the standard,' and 'curtail the curriculum,' of medical education."

The following communication illustrates some of the points concerning the transmission of secondary syphilis, to which we have recently alluded. It shews, in particular, that a chancre once healed may, nevertheless, during the progress of the constitutional disease yield a secretion which (although not capable of being again inoculated upon the same patient) may infect others, and produce in them a disease having all the characters of the primary indurated chancre:—

> "Two years ago a lady consulted me for what she described as a complete break up in her health, and as I had known her before, the change in her appearance was certainly very remarkable. She had been a widow, but had married some months before a gentleman much younger than herself, and, after some questioning, I discovered, at last, something that excited my suspicions. On making an examination, I found inside the labia two indurated chancres immediately behind the fourchette. They were too well marked to allow the slightest doubt to exist about their nature; and, on inquiry, I found she had first noticed them about six or seven weeks before; one of the glands in the groin was likewise materially enlarged. Before putting her under treatment, I saw her husband, and he at once informed me that nearly *a year before* his marriage he had contracted a sore, had been treated by an apothecary, and had been pronounced *quite well.* He had never any eruption on his skin, but had since laboured under ulcerated sore-throat and pains in his joints, which he attributed to rheumatism. I examined his penis, and between the prepuce and the glands on one side of the mesial line was the remains of a large ulcer, hard and irregular; but apparently quite healed, though I thought I could detect a slight watery exudation from its surface. Perfectly satisfied now in my own mind as to the nature of the affection his wife was labouring under, I put her at once under the influence of mercury, and with the usual local treatment the sores on the genitals healed, and the tumour in the groin disappeared. Some months afterwards, however, her chest and back were covered with a copper coloured eruption; the glands in her neck likewise became engaged, and a deep ulcer appeared on one of her tonsils. Under suitable treatment, she has perfectly recovered, and her health has continued good up to the present time. Her husband, who, I think, was not at first thoroughly satisfied as to the fact that he was the cause of his wife's illness, was shortly afterwards made painfully aware of its truth. He was attacked with syphilitic laryngitis, and his life was saved almost by a miracle. A large venereal bubo likewise formed in his groin, involving a degree of suffering that was absolutely pitiable."

We are glad to recognise the unanimity of consent with which our remarks on Sir B. Brodie and the peerage have been received by the public press—from the great *Jupiter Tonans* downwards. It would be a grand thing for science, if the mooted point should lead to the consideration of an important item, which we consider would necessarily be involved in the elevation of Sir B. Brodie to the Peerage; namely, the question of life-peerages. We readily admit that, unless life-peerages become a fact, it is not desirable that men of science should find their way into that august assembly, and for two reasons: in the first place, they have not (with the rarest exceptions) the wealth required for the respectable transmission of the honour to their offspring; and in the second place, it is very undesirable, for the honour and credit of science, that a dignified title should descend to a son, who might render the name ridiculous. Such distinctive honours appertain to the individual, are incarnated in him, and should, therefore, cease with his life.

The love of the French—male and female—for the canine species is well known. M. Boudin tells us, the municipal taxes showed that in 1856 there were 75,400 dogs in the department of the Seine. M. Block puts the number of dogs in France at two millions; and, reckoning their keep at two centimes a head, he finds that they cost 200,000 francs a day

—nearly £3,000,000 sterling per annum. At this pace of calculation the dogs in Europe (Christian and Turk) annually consume victuals to the value of about £14,000,000.—A Russian physician, Dr. Arendt, has sent a memoir to the French Academy of Sciences, which informs the world that he has obtained happy results from the employment of arsenic in hydrophobia.—M. Giraud Teulon, in a communication to the Academy of Sciences, indicates the movements which the lens undergoes through the contraction of the ciliary muscles; the movements serving the purpose of adapting the eye to distant objects.—The *Gazette de Breslau* says that "in the village of Lassen, near Brieg, in Silesia, there is at present raging a tetanic affection causing firm closure of the mouth, and death in three or four days. The inhabitants, instead of calling in the doctor, apply in another direction; viz., they attempt to open the closed mouth of the patient by means of a church key dipped in holy water."—Another journal announces that, according to the researches of an English doctor, eighty young girls have lost their lives in England through burns in consequence of wearing crinoline.—We learn from a correspondence in the *Semaphore* of Marseilles, that Dr. Bell, who long ago settled in Abyssinia, where he exercised the functions of general-in-chief and minister of the Emperor Theodorus, has been killed in battle at Dezai-Garad. Theodorus, notwithstanding, was victorious, and ordered one hundred and fifty prisoners to be killed to make up for the loss of his minister.—In the *Constitutionnel* we read that, under the powerful patronage of the emperor and the empress, there has been established at Fablaine (an agreeable spot in the valley of the Marne) an asylum for young girls discharged as convalescents from the Hôpital Eugénie. The house is already able to receive two hundred and fifty girls.—M. Trousseau has again hold of the Academy of Medicine by the ears. The eloquent professor is now explaining this novelty to them: that in most cases, what is usually considered as an apoplectic cerebral congestion, and is treated (in France, it must be understood) by bleeding, is in reality an attack of epilepsy. "I do not deny," says M. Trousseau, "the existence of cerebral congestion, in fact, I consider it as common enough; but what I doubt the existence of is the apoplectic form of congestion, the form in which the patient falls as if struck with apoplexy, and remains for a greater or less period deprived of sense."—The rage for new scientific societies is great. The formation of a new one at Lyons is announced.—M. Tigri renews his assertion to the Academy, that the fœtus swallows the amniotic fluid. The deglutition of it begins about the seventh or eighth month, and furnishes the elements of nutrition.—The Belgian Academy of Sciences having determined to offer to M. Quêtelet a medal as a memorial of the services rendered by him to science, the Belgian Government has requested permission to join in the proposed honour. "It is not", says the *Moniteur des Sciences*, "the first time that the Belgian Government has shown by its acts the value with which it regards the progress of science."—A. M. Jacquet, in the commune of Rians, by will leaves to a Parisian dame the whole of his property. She, reciprocally, does the same to him. By a singular coincidence, Madame dies on the same day and almost at the same hour as Monsieur; and hence there arises a question of much interest to the heirs of the parties. The journal which tells the tale says that if, after investigation, there be any doubt as to who is the survivor, the survivorship will be given in favour of the younger of the two; and if their ages are alike, then, according to presumption, the decree goes in favour of the male.—Our learned *confrère*, Dr. Parigot, writes *La Presse Médicale*, is on the point of starting for America, whither he is invited to occupy a brilliant position. He has resigned his office of physician to the Hospice of Orphans.

Association Intelligence.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, on Monday, March 18th.

Present:—Sir C. Hastings (in the Chair); Mr. Bartleet; Mr. Cartwright; Mr. Hurst; Dr. Lankester; Mr. G. May; Mr. Pemberton; Dr. Richardson; Dr. Stewart; Dr. Styrap; Dr. Houghton Waters; Mr. Watkin Williams; and Dr. P. H. Williams.

It was the unanimous wish of the Committee that Sir Charles Hastings should be requested to forward to the family of the late Mr. Norman, of Bath, the following resolution:—

"That this Committee cannot resume its business without first recording its sincere sympathy with the relatives of the late Mr. Norman, and the deep regret which the members individually feel for the loss of their able, indefatigable, and highly esteemed colleague."

The Financial Report for the year 1860, having been read by the Treasurer, was received, and directed to be published.

The following resolutions were adopted:

1. That the Secretary be requested to prepare, at every March meeting of the Committee of Council, a detailed list of members whose subscriptions are in arrear for one, two, three, or more years respectively.
2. That the price of the Journal be in future *five*pence and *six*pence instead of *six*pence and *seven*pence; and that the prices marked on the Journal, be a guinea for members, and one pound six shillings for those who are not members of the Association.
3. That Dr. Markham be requested to deliver the Address in Medicine, and Mr. Hoffman (of Margate) the Address in Surgery, at the next annual meeting.

Charles Hastings,
Philip H. Williams, M.D., *Gen. Sec.*

Worcester, March 19th, 1861.

FINANCIAL REPORT FOR 1860.

Birmingham, March 18th, 1861.

The Committee of Council beg to report that the accounts have been audited by the auditors appointed at the last annual meeting (Dr. Melson and Mr. Hadley of Birmingham); and the following are the sums received and paid by the Treasurer from the 1st of January to the 31st of December, 1860.

RECEIPTS.	£	s.	d.
Subscriptions and Arrears	2038	19	6
Contributions by Members	11	10	0
Advertisements and Sale of Journals	647	1	5
Total Receipts	2697	10	11

PAYMENTS.	£	s.	d.
Due to Treasurer	75	14	9½
Journal Expenses:			
Richards (Printing)	1741	17	6
Richards (Publishing)	100	0	0
Honeyman (Sundries)	67	13	5
Davidson (Commission)	44	2	6
Orrin Smith (Engraving)	17	0	0
Salaries:—Dr. Wynter, Mr. Holmes, and Dr. Henry	400	0	0
Contributors to Journal	28	7	0
Interest at Bankers	17	18	1
Executive Expenses:			
Secretary and Clerk	117	0	0
Secretary's Sundries	38	6	0
District Expenses; Post-Office Orders; Stamped Envelopes; and Collecting	21	13	7
	2669	12	10½
Balance due from Treasurer	27	18	0½
	2697	10	11

The following are the Assets and Liabilities on the 31st of December, 1860:—

ASSETS.	£	s.	d.
Subscriptions due	500	0	0
Advertisements	300	0	0
Balance from Treasurer	27	18	0½
Total Assets	827	18	0½

LIABILITIES.	£	s.	d.
To Richards for Printing	428	10	0
Richards' old account for Publishing	116	16	0
Honeyman (Sundries)	74	0	0
	619	6	0
Balance in favour of the Association	208	12	0½

It gives your Committee much satisfaction to be enabled to state that this is the most favourable financial statement that has been made to the Association for some years. Instead of there being a debt due to the Treasurer, there is due from him the sum of £27 : 18 : 0½.

The old debt, which has so long impeded the Association, is now nearly liquidated; the only remaining part of it being the sum of £116 : 16 due to Mr. Richards on an old account which is still unpaid. The other sums due to Mr. Richards for printing, and to Mr. Honeyman for sundries, are the ordinary current expenditure of the Association, which arise quarterly.

It will be seen also, by comparing the assets and liabilities of the Association for the year 1860 with the one of 1859, that the result is favourable; for, taking this view of the condition of the Association, it will be seen that the liabilities have diminished by the sum of £114 : 7 : 9½, whilst the assets remain the same.

Altogether, the prospect is encouraging, as there is reason to believe that, by the exercise of a prudent economy, the Association will at the commencement of the year 1862 be free from the old debt, and then there will be more funds available to maintain the necessary expenditure on the Journal and the other objects of the Association.

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, March 12th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

REMARKS ON THE CAUSE OF THE CLOSURE OF THE VALVES OF THE HEART. BY W. O. MARKHAM, M.D.

Dr. Markham stated that the usually received accounts of the mode of closure of the heart's valves were unsatisfactory, and incapable of fully explaining the phenomena attending it. The closure is effected during different periods of the heart's action, and may be divided into two stages. During the first stage (*i. e.*, during the ventricular diastole) the valves gradually rise upwards towards each other, *pari passu* with the distension of the ventricles, so that their free borders come into loose contact. The second stage corresponds with the ventricular systole, whereby the valves are suddenly and forcibly brought into firm and perfect contact by the pressure of the blood.

The author considered that a satisfactory explanation of the cause of the first stage of this closure has not yet been given. The usually received explanation is that the blood during the ventricular diastole raises the valves up towards each other. But this is manifestly incorrect, because the pressure of the blood passing from the auricle to the ventricle *must be* as great upon the auricular as upon the ventricular surface of the valves; it is, in fact, greater.

On investigation, Dr. Markham satisfied himself that the valves are raised towards each other during this first stage of their closure by the agency of elastic tissue, this elastic tissue being so disposed in the valves as to act in a manner at once most simple and effective. The auriculo-ventricular and the semilunar valves have all essentially the same structure. They are formed of elastic membrane, and inelastic white fibrous cords. In the case of the auriculo-ventricular valves, as observed in a bullock's heart, a thickish layer of elastic membrane may be readily dissected from the auricular surface of the valve, being loosely attached, except at the free edge of the valve, where it becomes blended with the under layer. This elastic membrane is retractile in all directions, but its fibres seem to run chiefly in a direction from the attached to the loose border of the valves. The lower (ventricular) surface of the valves may be said to consist of white fibrous cords—the prolongations into them of the chordæ tendineæ, united together by elastic tissue; the lower border of these cords projecting from the under surface of the valves, giving them a furrowed appearance.

In consequence of the disposition of the elastic fibres, the free borders of the valves have a tendency (when their elastic tissue is brought into play) to approach their attached borders, and in the direction of the auricular surface of the valves. At the end of the ventricular systole the valves are pressed down into the ventricles and lie flat against the inner walls, and the elastic tissue is put on the stretch. Then, during diastole, as the blood flows into the ventricles, the weight of the valves is diminished, and so the elasticity of the stretched elastic membrane is permitted to come into play. This contraction of the elastic tissue causes the closure of the valves during the first stage referred to.

Any one may readily satisfy himself that no other explanation of the phenomenon is possible. When the auricles are removed from the ventricles, *the coagulated blood carefully removed*, and water poured into the ventricles, it will be seen that the valves (if healthy) not only rise up towards each other as the water flows in but that they remain in contact when the current is arrested, and will, if depressed in the water, again rise towards each other when the pressure is removed. As the specific gravity of the valves is considerably greater than that of blood, it is evident that no other moving force than that of elastic tissue can be in action here.

Exactly the same disposition of parts occurs in the semilunar valves, with this necessary difference—that the elastic layer is spread over their *ventricular* surface. The object is here manifestly the same as in the former case; namely, to assist in drawing the valves away from the arterial walls, so as to put them in a position of being readily brought together at the instant the ventricular systole ceases.

These facts may, perhaps, explain some points in diagnosis which have hitherto puzzled the auscultator; for instance, the cause of a cardiac murmur heard during life in cases where the valves have been found, after death, to all appearance competent. In such cases we may fairly suppose that the elastic tissue is impaired, and thus regurgitation permitted at the commencement of the ventricular systole. We may also assume that to *prove* the capacity of the auriculo-ventricular valves for effective closure, we must try them, as above described, by removing the auricles and filling the ventricles with water.

PATHOLOGICAL RESEARCHES INTO THE DISEASES OF THE EAR. BY JOSEPH TOYNBEE, ESQ., F.R.S.

The author commenced his paper by stating that in a tabular view of the morbid appearances found in the dissection of 1013 diseased ears, published in the thirty-eighth volume of the *Medico-Chirurgical Transactions*, he reported ten instances in which a molluscous tumour was developed in the external auditory meatus. Since the publication of that tabular statement, the author has met with several additional cases of molluscous disease in the ear, and he gives the result of his experience of this disease in the present paper. Although molluscous disease has been frequently described by surgeons as occurring in various parts of the integuments, its presence in the outer meatus of the ear has not attracted their notice, notwithstanding the injurious effects so often produced upon the petrous bone, and sometimes upon the brain. Mr. Toynbee supposed that these cases have hitherto been comprised under the terms *otitis* and *otorrhœa*, and where the death of the patient has occurred, its cause seems to have been ascribed to caries of the petrous bone, originating in otorrhœa. The singular characteristic of this disease, as pointed out by the author, is the tendency of the tumour to advance inwards, and cause absorption of the petrous bone. Thus in the eighteen cases of this disease dissected by the author (and the whole of the preparations, with several drawings, were laid before the Society), although the tumour had varied in size from that of a milletseed to a hazelnut, the petrous bone was more or less absorbed in every instance. This absorption of the petrous bone had taken place without the production of caries, or even inflammation of the osseous tissue; indeed the apertures made by the tumour had well-defined margins as if effected by a chisel. In some instances the meatus is so greatly dilated by the tumour as to admit of the passage of the finger as far as the membrana tympani. The effect of the tumour is to produce abscess in the brain, the result of irritation within the ear; in the cerebellum, when the posterior part of the meatus is the seat of the disease; in the cerebrum, when the upper part is attacked by it. The circumstance that the presence of a molluscous tumour in the ear seems capable by the irritation it induces to produce an abscess in the brain is adduced as additional evidence in favour of the opinion, that when abscess in the brain co-exists with disease of the petrous bone, the abscess, as a general rule, is caused by the affection of the ear, and the disease of the petrous bone is not produced by the abscess in the brain. Molluscous tumours, by their effect on the membrana tympani and tympanic cavity, frequently cause deafness of a serious character. The membrana tympani is often perforated, and sometimes so pressed inwards as to be in contact with the promontory.

Treatment. Considering the tendency of molluscous tumours, when developed in the outer meatus of the ear, to advance inwards, and thus injure the membrana tympani, the petrous bone, and the brain, it is desirable that they should be removed at an early period of their development. For this purpose, in the early stages, before the bone is seriously affected, the tumour should be laid freely open by a crucial incision, and the contents, as well as the capsule, wholly removed. In the later stages, when the attached surface of the tumour lodged in the petrous bone may possibly be in contact with the dura mater, considerable caution and delicacy are required to secure its removal. A crucial incision may be made into the tumour, and the laminated contents removed by the lever-ring forceps. In cases where the tumour has opened towards the meatus, and a copious fetid discharge is poured out, the syringe and warm water may be used for the purpose of removing the softened contents of the tumour. This process of syringing should be continued; for notwithstanding the free discharge into the meatus, the tendency of the tumour is to develop itself towards its attached surface, and cause injury to the brain.

The author gave the details of six cases of molluscous tumour, with the *post mortem* appearances. He subsequently placed in a tabular view the histories, symptoms, and morbid appearances of the eighteen cases which had fallen under his notice; and he finally cited one or two cases treated successfully, and where the removal of the tumour had caused a cessation of the pain, discharge, and cerebral symptoms.

MEDICAL SOCIETY OF LONDON.

Monday, March 11th, 1861.

William Coulson, Esq., President, in the Chair.

Thanks were unanimously voted to the President, officers, and Council of the Society for the past year.

The new President returned thanks for the honour conferred on him on his election to the chair which had been filled by such men as Fothergill, Lettsom, and Clutterbuck. The Society, though the oldest medical institution in London, not only was not oppressed by the weight of years, but grew more vigorous with age. The object of the Society was to advance the science of medicine; and this can be done only by cooperative and united efforts. In the infancy of a science, a single mind may perhaps avail to master all the known facts; but afterwards its progress requires the action of many intellects. Science, like wealth, requires interchange for its accumulation. We require in medicine deductions from facts observed with care and accuracy; and this is impossible without combination—it is beyond the power of a single mind. Besides, the observation of facts in natural history presents so many phases that we must study them at various times and periods, and under different circumstances. And, on the other hand, combination is required to moderate the tendency of man to hasten to conclusions. He had confidence that the Fellows of the Society would contribute a supply of essays and facts, and aid in drawing inferences from them, for the advancement of the science of medicine.

SUGGESTIONS FOR AN IMPROVED PRACTICE IN STRANGULATED HERNIA. BY THOS. BRYANT, ESQ., F.R.C.S.

Mr. Bryant, after some preliminary remarks on the interest connected with the subject of hernia, and on the modifications in many of our former opinions produced by daily increasing means of observation, and by the record of carefully observed facts, stated that the subject of hernia had not escaped this general influence. He then proceeded to comment on certain practical points.

The first point was *the use of chloroform in strangulated hernia.* It was not as an anæsthetic that he brought it under notice; but he wished to demonstrate the benefits which had resulted from its use in aiding the reduction of strangulated hernia, and to point out the influence which such a remedy should have in modifying and simplifying our ordinary practice.

The author then gave a sketch of a case of strangulated hernia in which every ordinary means for reduction had been attempted, and had failed, and in which the attendance of the operating surgeon had been demanded. All preparations might have been made for herniotomy; but, when the patient had been completely brought under the influence of chloroform, the surgeon might, gently taking the tumour in his hands, with the slightest manipulation reduce the hernia. Any feeling of disappointment at this result can be but momentary, as the triumph of success with such simple means must have its weight. When a patient has been completely brought under the influence of chloroform, who is suffering from a recent strangulated inguinal hernia, its reduction may with some confidence be expected. Mr. Bryant quoted one case out of a score which he possessed, and remarked that, with one exception, all were inguinal. Very few cases of femoral hernia were reduced by the taxis, as compared with inguinal; and herniotomy was, as a rule, required when a femoral hernia had been strangulated many hours. This fact was illustrated by the last year's experience of Guy's Hospital, where, of twenty-five cases of strangulated femoral hernia, twenty were operated on, and five only were reduced by the taxis; while, out of twenty-two cases of strangulated inguinal hernia, four only were operated on, and eighteen were reduced by the taxis. The proportions were thus exactly reversed.

If, then, we possess in chloroform the most efficient means for producing complete relaxation of the muscular system, and therewith of the parts involved in hernia; and, if it be acknowledged that a patient can be more speedily and effectually brought into that relaxed condition by chloroform than by any other method which we have been in the habit of employing, there was but one conclusion at which he could arrive—that we should in all cases employ at once the most certain and most efficacious practice, and neither waste time by delay, nor prostrate the powers of the patient by the use of other remedies. By the use of chloroform, delay is not experienced, and durable depressing influences are not exerted; and, in the majority of cases of strangulated hernia, the administration of chloroform should be primarily selected. In quite recent herniæ, he believed that the warm bath and full doses of opium, followed by the gentle application of the taxis, may be expected to succeed; and it was in such cases, and in such alone, that he advised their use. But such cases in hospital practice were unfortunately rare; and four, five, six, and even ten days, was the average period of strangulation of the cases admitted into Guy's Hospital.

When the patient has been completely brought under the influence of chloroform, the force required to reduce the hernia is simply nominal; anything like violence must prove injurious, and would be unwarrantable. If failure ensue, herniotomy should be at once performed; no other means are left from which to select.

The author then dwelt upon the evils of prolonged or forcible taxis, and of delay as caused by the use of other means; and stated that he believed it would be better for all cases of strangulated hernia to be treated at once by the administration of chloroform, followed by gentle taxis, and, on that failing, by herniotomy, than that any risks of delay should be occasioned by the use of remedies, or of injury to the strangulated bowel by the continued and repeated application of the taxis. He believed that by such a practice the cases of death from strangulated hernia would be but rare, and the cases of maltreatment would be less numerous.

For such extreme mortality as is known to exist, the author affirmed that mere neglect could alone account. And this neglect was not of a mere passive nature, in which the case was left alone, and the harm done but negative; but, in the majority of cases, maltreatment, prolonged and forcible taxis, powerful purgatives, and delay, all had their influence, from which nothing but a fatal result could be expected. It was rare to admit into a London hospital any case in which such practice had not been employed.

The author then proceeded to consider the *after treatment of hernia.* He doubted whether he should be stating anything far from the truth in asserting that the one point of anxiety, which all surgeons of the present or past generation experienced after the reduction of a strangulated hernia, was to hear that the bowels had regained their functions, and had fairly operated. Within limits, he believed that such anxiety was natural; but it should not be so strong as to urge the surgeon to interfere with Nature's processes, and by artificial means to stimulate the bowel's action.

In "the good old times", when pathology was in its infancy, and the processes by which injuries are repaired were but little understood, the surgeon believed the constipation associated with a strangulated hernia to be the disease, and the hernia simply the cause; and, although it was true that his treatment was at first directed to return the descended bowel into the abdominal cavity, having done so, he employed his skill, aided by the force of the *Pharmacopœia*, to overcome the constipation, believing that he was thus acting only in accordance with correct practice.

The modern surgeon, with his improved knowledge, recognises the want of correct principles on which such evil treatment was directed. He knows that a strangulated bowel means an injured or inflamed one, and that in proportion to the amount of injury sustained is absolute rest required to allow of repair being carried out. He knows also that, as soon as this injured or inflamed bowel has partially recovered, its natural functions will return, and, as a consequence, the constipation will disappear.

On such a principle all modern practice is based. Instead of goading the injured bowel to a premature action, our efforts are directed to maintain repose; in lieu of purgatives to overcome the constipation, we now prescribe opium to secure rest, with the confidence that, as soon as the normal conditions of the intestines are restored, their normal action will appear, and with it convalescence.

The author then dwelt on the value of the opium treatment, but gave a caution against carrying it too far, and then proceeded to give a table of cases showing how long a time may elapse after herniotomy without any action of the bowels taking place, and without the least cause of apprehension. In nearly 60 per cent. of the cases tabulated, the bowels did not act before the fourth day; and, in 22 per cent., seven, ten, twelve, and even twenty-three days, passed without any bad result taking place. It is a rare thing for any untoward symptom to make its appearance after the reduction of a strangulated hernia, from simple constipation; and such a condition may be tolerated for many days without the least apprehension of alarm. If decided symptoms appear, evidently the result of a loaded intestine, some medical interference may be called for; but let this be of the mildest description, such as a simple enema, or a small dose of olive or castor oil. More powerful purgatives do harm, and should never be administered. He gave an opinion that he would rather err on the side of delay than by over-anxiety stimulate at an early period an injured although returned bowel.

Mr. Hart asked what form of taxis was applied in the cases of inguinal hernia of which a large proportion was mentioned by Mr. Bryant as reduced.

Mr. Bryant said that chloroform was used in the majority of them.

Mr. Hart thought the surgeons of Guy's Hospital had had particularly good fortune in the treatment of inguinal, and particularly bad in femoral hernia. Under chloroform, more success might be expected in inguinal than in femoral hernia, the former being more under the influence of muscular action. But as muscular action is not the only cause of stricture, surgeons should hesitate before employing a means which acts by relaxation only. He thought that there would still be a tendency to employ the warm bath, and such other means. As to constipation, he believed that all hospital surgeons in London were now agreed that purgation is not desirable; while, on the other hand, many are of opinion that the opium treatment is often pushed too far.

Dr. Kidd said that the purgative treatment is still pursued at two hospitals.

Mr. Bryant, in reply to a question from the President, said that he had never seen any dangerous effects follow the use of chloroform in hernia. But in one case, that of a woman admitted with a tumour resembling a hernia, chloroform was given, and the taxis used. Sickness then first appeared. Mr. Bryant explored the tumour, and found a large cyst in the crural ring, and no indication of hernia. The chloroform here puzzled the operators by causing vomiting.

Mr. De Méric said that, although chloroform had many relaxing qualities, other measures may often be of great use. We must notice the condition of the contents of the sac, as well as of the other parts. Mr. Hilton used to contend that, by gentle and continuous manipulation, the air and fluid in a hernia might be driven out, and the congestion reduced; so as to render the intestine more supple. Besides this, another means had been overlooked; viz., the use of ice, which he had seen to have much the same effect as Mr. Hilton's method. Chloroform might be used if failure be imminent; but the patient should be informed that the operation would be at once undertaken if the chloroform failed to effect reduction. The state of the bowel, in reference to returning it, would be an important subject for discussion. In a paper read before the Royal Medical and Chirurgical Society, there was a case related in which there were grey spots on the intestine; and the operator, fearing it might give way, made a slit in it, in the hope of forming an artificial anus. But we cannot be certain that the opening will come opposite the wound. Mr. De Méric had had under his care a woman who had strangulated femoral hernia for ten days; which her medical attendant, however, believed he had reduced. She was brought into the German Hospital moribund. After careful dissection, the sac was found to be thick, and appeared to contain fluid. It was opened, but was empty. As soon as the sac was returned, a stream of fæcal matter came down. There was one chance left—to bring down the sac, and apply sutures, with the chance of forming an artificial anus. The woman died, however, in six or seven hours.

Mr. H. Smith, while he thought that the use of purgatives in general was injurious, believed that there were cases where the bowels should not be allowed to remain unopened too long; for, in some cases (of which two had come under his own observation), it might be supposed that reduction had been accomplished when it had not; and the symptom might be masked by the effect of opium—a small portion of bowel remaining strangulated, and the symptoms recurring on the action of a purgative.

Mr. J. F. Clarke asked what was the relative amount of mortality when chloroform had been used, and when other means had been used before operation.

Mr. H. Thompson thought that, as to chloroform, the general rule now was to give it at once; and then, if the taxis do not succeed, to operate. He believed that chloroform prevented the patient from pushing down the bowel by involuntary inspiration. This was especially the case in children. The flexion of the limb relieved the abdominal walls very little. As to purgatives, he believed the practice of giving them was dying out. But he thought the opium treatment was sometimes overdone. Opium should be given largely during twenty-four hours where much purgatives have been given beforehand, but not otherwise; and Mr. Thompson had had a successful case in which, no purgatives having been given before the operation, no opium was given after it.

Dr. Copland had heard in the north of England of a case of death from chloroform given for strangulated hernia. As to the after treatment, this must depend much on circumstances; certain contingencies might require different treatment. He noticed the practice (common, he believed, in Russia) of effecting reduction by exhausting the air over the abdomen.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, March 6th, 1861.

W. Tyler Smith, M.D., President, in the Chair.

The following gentlemen were proposed for admission as Fellows of the Society:—W. B. Owen, Esq.; J. B. Smith, Esq.; T. H. Jackson, Esq.; Robert Synnot, M.D.; Gilbert Love, Esq.; R. S. Tomlinson, Esq.; W. Cumpstone, Esq.; James Clark, M.D.; Edw. Jones, M.D.; Arthur Noverre, Esq.; H. G. Watts, Esq.; and Alfred Collinson, M.D.

Dr. Borham exhibited an apparatus by which an abdominal bandage might be tightened gradually, as occasion required. He also showed a pair of forceps for extracting the secundines, etc., in cases of abortion.

Mr. Albert Napper read a paper "On Defective Formation of Skin around the Umbilicus; Plastic Operation."

ON FIBROUS TUMOURS OF THE UTERUS TREATED BY SURGICAL MEANS. BY I. B. BROWN, ESQ.

The author stated that, on Dec. 7th, 1859, he had read a short paper before this Society, "On a Case of Fibrous Tumour of the Uterus, illustrating a Surgical Operation for its Cure." He did not intend to detail the operative measures resorted to, as they had already been sufficiently described in the previous paper, nor did he intend to enter into the pathology of uterine tumours, his object being to elucidate the success of a particular plan of treatment by an appeal to the results of experience. At the same time he thought fit to preface his subsequent remarks by stating that the lady, whose case was recorded in the previous paper, had continued ever since in robust health. It was only of intrauterine fibrous tumours of the non-pedunculated form, growing from the inside of the uterus by a broad base, that he intended to speak.

Mr. Brown then related the histories of six cases which he had treated by incising the os and cervix uteri, and gouging the tumours. In three cases the operation was followed by cure, in two by relief, and in one by death from pyæmia. The operation of gouging the tumour should be performed at a subsequent period to the incision of the os uteri. The cases related shewed, in Mr. Brown's opinion; 1. That this class of tumours may be destroyed by cutting into and destroying a portion of their tissue; in other words, by gouging a portion out; 2. That this operation could be performed successfully and safely. Out of the dozen or more cases in which this plan had been pursued, Mr. Brown had lost but one, that related in the present paper; 3. That the preliminary division of the os and cervix has in itself the very important advantage of nearly, or quite, arresting the uterine hæmorrhage, the most serious symptom attendant on these tumours.

Mr. Brown stated that the principal difference between his plan and that of Dr. Atlee was, that whereas the latter gentleman made an incision through the capsule of the tumour, with a view to its detachment, and, to second this purpose, gave ergot of rye, Mr. Brown aimed at the disintegration of the tumour, by cutting into its centre, and breaking it down, thus setting up a process of ulceration, but making no attempt to separate the tumour bodily from the uterine wall.

Mr. Brown showed the instruments which he had been in the habit of using in the operation. They very much resembled an ordinary centre-bit, twisted in a spiral manner, with various cutting ends. He had experienced great difficulty in getting these instruments to hold, so as to gouge a piece quite out, and had thought something was required to hook the tumour while it was being cut. This idea had been very ably carried out by Mr. Harper. This gentleman's instrument consisted of a hollow tube of steel, with cutting knives. Contained in this tube was a hook, which could be pushed through by a spring, and thus grasp the tumour, whilst the circular knives were carried through it by means of a screw. In this way a piece was actually cut out of the tumour. The instrument was graduated, so that by measuring the tumour from without, a pretty correct estimate could be formed as to how far the tumour was cut into.

An animated discussion followed, in which Dr. Hall Davis, Dr. Graily Hewitt, Dr. Routh, Dr. Tanner, Dr. Oldham, and Dr. Richards took part.

ON UTERINE HÆMATOCELE. BY HENRY MADGE, M.D.

Mrs. L., aged 34, had been married thirteen years, and had three children, the eldest being now eleven and the youngest six years of age. She had inflammation of the bowels six years ago, and had not been pregnant since. Her appearance was healthy and vigorous; catamenia regular. On Oct. 27th, 1860, the menstrual discharge having existed two days, she was attacked with violent pains in the hypogastric region, and was treated for local peritonitis. In a week she was getting on well, but imprudently went out of doors. Whilst walking the catamenia appeared in increased quantity; a feeling of faintness came on, and she was brought home in a state of collapse; this lasted until the following day. When reaction took place, peritoneal symptoms were very evident in the lower part of the abdomen; and with theses symptoms there was a large abdominal tumour, extremely tender to the touch, extending to the umbilicus and into the pelvis, and occupying the whole of the posterior part of the pelvic cavity. The uterus was retroverted, and the os uteri pressed up behind the symphysis pubis. During the next few days she suffered severely from acute peritonitis; but gradually the severe symptoms subsided, leaving the abdominal pelvic tumour unchanged in shape and extent. About the middle of November a discharge of a large quantity of blood took place *per rectum;* the pelvic part only of the tumour seemed to be affected and partially emptied by it, the abdominal portion remaining as hard and large as before. When the monthly period arrived, the catamenia appeared, and lasted two days. On the second day of their appearance, many of the symptoms which were present at the onset again showed themselves—the anæmic condition, partial collapse, and pain in and around the abdominal tumour, being the most prominent. She soon rallied, and was in many respects improving, when phlegmasia dolens in a severe form attacked the left leg, and a week afterwards the right leg became affected with a similar though milder attack. This double seizure completely prostrated the patient. When the next menstrual period arrived there was a slight discharge during one day, but on the next day there was a profuse discharge of altered blood and clots *per rectum.* This continued two days, and must have amounted to three or four pints. The abdominal tumour speedily disappeared; extreme prostration came on; and she died on December 8th.

At the *post mortem* examination a large cavity forming the hæmatocele was found occupying the pelvis behind the uterus, bounded above by the intestines matted together, and behind by the rectum; being, in fact, the utero-rectal peritoneal cul-de-sac extended and altered by disease. A large clot, several small clots, and a pint of blood were taken from the cavity. The interior of the latter was of a dark leaden hue (the same dark hue pervaded nearly all the intestines). The walls were shreddy and uneven, as if from irregular deposit of lymph and fibrine. In some places, long bands of false membaane were hanging loosely. One large band divided the sac into two nearly equal parts, and through this septum their was an opening of about the size of half-a-crown. At the upper part of the left broad ligament there was an opening of about the size of a fourpenny-piece, on the one side communicating with the capsule of the left ovary, and on the other with the upper division of the large cavity lying behind it. The capsule of the ovary was distended to about the size of an orange, and was divided into two distinct cells by a firm band, each cell containing blood and clots. The small opening in the broad ligament led into the smaller of the two ovarian cells. A small portion of stroma, covered by a corresponding portion of capsule, was all that remained of the ovary. There was no opening in the right broad ligament, but behind the ovary which it contained there existed a firm mass of false membrane and fibrine, which seemed to be inseparable from the peritoneal covering. The ovary itself was congested and enlarged, and fixed in its position by adhesions. The stroma was healthy. On cutting into it five or six small clots shelled out of little cavities—distended Graafian vesicles. One of these contained a clot of the size of a pea; another near it appeared to have only recently closed up, and formed a well-marked cicatrix. A few healthy Graafian vesicles were also seen, containing transparent fluid. In the general peritoneal cavity the inflammatory adhesions did not extend anteriorly beyond the fundus uteri. The peritoneal coverings of the anterior surface of the uterus, of the bladder; and of all the abdominal viscera, were smooth and healthy. The broad ligaments were thickened and opaque; partly owing to false membrane between the two layers, the result of external peritonitis. The uterus was slightly enlarged, the mucous lining being thickened, and at its lower part striated with bloodvessels, having somewhat the appearance of an incipient decidua; there was, however, no glutinous matter in the neck, nor did the latter wear any of the appearances common to pregnancy. The left Fallopian tube was totally impervious; the right was closed at the uterine end, and was pervious to the extent of half an inch at its fimbriated extremity. The rectum, when laid open, was observed to be very dark from congestion; this rapidly shaded away above into a healthy condition, but below continued to its lower extremity. In the midst of the darkest patch, in the upper third of the rectum, and nearly on a level with the normal position of the os uteri, there were two irregular transverse openings in a line with each other. The breach in the mucous coat was about three-quarters of an inch in length, and seemed to be common to both openings; a portion of the other coats, several lines in extent, separated the two openings from each other. When the parts were removed *en masse* from the body, water poured into the cavity of the hæmatocele flowed out freely through the openings in the rectum; and on securing the openings by forceps the whole sac held upwards of a quart; its capacity during life must have been much greater. The fluid blood taken from the hæmatocele, examined under the microscope, showed blood-corpuscles, some perfect, others undergoing various degrees of change; also pus-globules and little black and yellowish masses, some of them assuming a crystalline forms; the chief part, however, was made up of undefinable *débris* of blood, fibrine, and pus. The smooth cavity in the interior of the large clot removed with the blood was examined; but neither membrane, vessels, nor structure of any kind were found in it.

The case was therefore one of "intra-peritoneal uterine hæmatocele," produced by one of its most common causes—the bleeding from ovarian vessels at the menstrual periods, and one of those forms of the affection in which operative measures would only have hastened the patient's death. In connexion with the phlegmasia dolens, Dr. Madge exhibited at a previous meeting the left iliac artery and vein; the latter contained a firm cast of fibrine, which could not be separated from the vessel without tearing. Its coats were greatly thickened, and were much thicker than the coats of the artery, which was empty, and in a healthy condition. The surrounding tissues were infiltrated with inflammatory serum and lymph, some of them being matted together, and a large gland, of a purplish colour, was adhering to the external coat of the vein. A cast of fibrine was also shown taken from the right iliac vein, another from the inferior vena cava, and smaller ones from the lesser vessels. The coats of the vena cava were healthy; those of the right iliac vein thickened. With one exception, the abdominal viscera were in a healthy condition. The spleen was about four times its usual size.

In his remarks on the case, Dr. Madge spoke of its peculiar features as contrasted with others already recorded. He also alluded to the differential diagnosis of uterine hæmatocele, and the probability that cases of the latter affection are not unfrequent; but from the comparatively little attention hitherto given to the subject, they have been allowed to run their course unrecognised, and treated for some other complaint; this remark being particularly applicable to those cases cured by absorption. Reference was also made to the disputed questions concerning intra- and extra-peritoneal uterine hæmatocele, and to the subject of diagnosis and treatment as laid down by the leading French authorities. The paper was accompanied by two coloured drawings.

Dr. Tyler Smith observed, that there was no subject within the range of uterine pathology of greater interest and novelty than hæmatocele. He considered it to be essentially a form of ovarian or Fallopian menstruation, vicarious in character. The ovaries or Fallopian tubes in these cases produced the menstrual secretion, just as the lungs or stomach did in the case of gastric or pulmonary vicarious menstruation. When the ovaries or Fallopian tubes poured out blood at the menstrual periods, there was no means of escape, as in other forms of vicarious menstruation, and the fluid became accumulated in the recto vaginal *cul-de-sac* of the peritoneum. Under these circumstances, the peritoneum threw out lymph with great rapidity, and converted the pouch into a complete sac by covering it over with a membranous exudation. The tumour of the periuterine hæmatocele was apparently thus formed, and it frequently increased in size by further accumulation at successive menstrual periods. The common method of escape was by ulceration through the rectum, and the discharge of the altered and retained blood by the bowels. He had seen three cases in which this had occurred, and which had resulted in cure. He should be strongly inclined to puncture the tumour in such cases through the rectum, and to give emmenagogues with a view to the production of healthy menstruation. The case of Dr. Madge was one of the most interesting which had been placed on record, and he could only suggest that a better result might have been obtained if a free opening by the rectum had been established at an early period.

Dr. Madge in reply, mentioned that M. Bernutz had shown the hopelessness of all kinds of treatment in cases of uterine hæmatocele where the Fallopian tubes have become obliterated.

Correspondence.

THE REGISTRAR-GENERAL *versus* THE MEDICAL ACT.

Letter from Henry Terry, Jun., Esq.

Sir,—Whether statistical inferences are worth anything or nothing may be a question; but that the data for arriving at them should be as exact and reliable as possible, there can be no question. To such an end have various legal enactments been made during the last few years; but what respect these acts receive from the "Registrar-General of England," I am at a loss to see, under the following somewhat peculiar circumstances.

I have recently been applied to for a "certificate of death" for a former patient of mine, whom I had not seen for more than six months; and who had been able to return to his usual occupation soon after my attendance ceased. I was aware that he had subsequently been attended up to his death by a non-registered gentleman, and was therefore much surprised at the application for a certificate of death, which I need scarcely say I declined to give. Upon this refusal, the same gentleman (who I am led to believe at first declined to certify) subsequently granted one; which being accepted by the subregistrar, the death was duly registered.

For the sake of information, I addressed a letter to the Registrar-General, relating the above facts; and I append his reply thereto, as it may be both interesting and instructive to many of our associates.

"General Register Office, Somerset House, March 6th, 1861.

"Sir,—I am directed by the Registrar-General to acknowledge the receipt of your letter of the 3rd instant, and to inform you that Registrars have been instructed to receive certificates of the cause of death from medical practitioners who were qualified according to the law as it stood prior to the passing of the Medical Act of 1858; and from those who, although not included in that category, possess any of the qualifications mentioned in Schedule A of that Act, *but from none other*.

"I am, Sir, your obedient Servant,
"Thomas Mann, *Chief Clerk*."

I must leave others to determine how far the Registrar-General is justified in issuing instructions which ignore and repudiate Clause 37 of the Medical Act, which runs as follows, and to my mind appears sufficiently stringent.

"Clause 37. After the first day of July 1859, no certificate required by any act now in force, or that may hereafter be passed, from any physician, surgeon, etc., shall be valid, unless the person *signing* the same be registered under this Act."

Mr. Mann appends to his letter the words "but from none other." Now it is notorious that certificates of death are received by sub-registrars from all persons who assume to themselves the offices and duties of attending the sick, whether they be, or be not, qualified according to the old law; and from those who do, or do not, "possess any of the qualifications mentioned in

Schedule A." The obvious conclusion is that the Registrar-General violates the Act of Parliament in the one instance; and in the other (according to the chief-clerk, Mr. Mann), he issues instructions which are not acted upon by the subregistrars.

Have these latter gentlemen received any other more private instructions?

I am, etc., HENRY TERRY, JUN.

Northampton, March 9th, 1861.

GLAUCOMA AND IRIDECTOMY.

SIR,—The writer of the leading article on glaucoma and iridectomy in your last number looks forward to the paradisical period when the deluded followers of such "indiscriminating and prejudiced" teachers as Dr. Mackenzie, Dr. Jacob, Mr. Wilde, etc., will be liable to prosecution for malpraxis.

This is becoming serious. What is to be done should Mr. Hancock, Mr. Nunneley, Mr. Solomon, and the hundred others who may yet invent operations, also resolve to enforce their views by fine and imprisonment? Must we perform *all* the operations on our patient? Should there not be sufficient iris or ciliary muscle in the diseased eye, may we work out the balance in the other? Or may we put ourselves in safety by performing the equally fashionable operation of "enucleation" of the eyeball?

I am, etc., A POSSIBLE VICTIM.

March 1861.

CHLOROFORM IN OPHTHALMIC OPERATIONS.

LETTER FROM A. ERNEST SANSOM, M.B.

SIR,—I have read the letter of Dr. Kidd on this subject in your last number; but I have failed to discover that any light has been thrown either on the question of the relative value of the two modes of operating for the relief of glaucoma, or on that of the employment of anæsthesia in eye-surgery generally.

Chloroform is certainly not necessary to the performance of Mr. Hancock's operation; but neither also is it of necessity to be used prior to iridectomy. Since June 1859, I have been connected with the Westminster Ophthalmic Hospital, as house surgeon, and as medical registrar; and I have never once seen it administered for the performance of the latter operation. The administration of chloroform in these cases is, therefore, a matter which rests entirely with the fancy of the operator, and is required by neither operation, though it may be of advantage to one. At any rate, its non-employment cannot exalt the value of one of the operations above that of the other. I have never myself observed any ill result from the employment of chloroform prior to iridectomy; nor do I see how "the probable escape of the vitreous" is a possible consequence thereof, so long as the lens remains undisplaced. My friend, Mr. Lawson, tells me that he has never seen one instance, in which this, or any other untoward accident attributable to the chloroform, has occurred during the performance of iridectomy. It remains for these two operations to be judged by their inherent merits, and the success which attends their performance respectively.

I understand from Dr. Kidd's letter that minimum doses of chloroform throw forward the globe of the eye, and render rigid the intraorbital muscles. Now, to arrive at the condition effected by a maximum dose, a patient must have passed through the stage induced by a minimum case; and I cannot say that it has been my lot to witness these phenomena during the progress of anæsthesia. I should much like to know if they have been remarked by others accustomed to the use of chloroform.

One of the most important points in the management of a patient anæsthetised for the performance of an eye operation is, to my mind, this: to carefully watch the period of semi-consciousness prior to complete recovery from the effects of the anæsthetic. The patient is apt, if unobserved, to rub his hand over the eye which has been operated upon, and may thus inflict on himself very serious mischief.

I am, etc.,
A. ERNEST SANSOM, M.B.

70, Brook Street, Hanover Square.

SPONTANEOUS EVOLUTION.

LETTER FROM W. W. THOMAS, ESQ.

SIR,—I enclose you the particulars of a case of "spontaneous evolution," which you may, perhaps, deem worthy of a space in the JOURNAL.

I was requested to see Mrs L—— on Monday, the 25th March. Age 29; third labour. When I visited her, I found that she had been ill since the previous Thursday; and that the liquor amnii had escaped on Friday morning, after which she suffered only from occasional and very slight pains. On making an examination, I found the left shoulder presenting. All my efforts to turn were unavailing, as it was impossible to introduce my hand sufficiently far into the uterus. During my attempt, the arm came down. I then sent for a brother practitioner (residing about twelve miles distant) to assist me, giving the patient a very full dose of laudanum at the same time. My endeavours to turn having excited the uterus to considerable action, I also endeavoured to obtain a little repose until my friend arrived; but in about an hour and a half after administering the sedative, I was suddenly summoned to the bedroom, and agreeably surprised at discovering that an average sized, fully developed, dead male child had been born. The placenta was expelled in a few minutes, and the woman recovered without a bad symptom. Probably owing to the influence of the narcotic, she suffered comparatively little pain during the expulsion of the child.

The patient is a little woman, and her pelvis of natural dimensions. I am, etc.,

WILLIAM W. THOMAS, M.R.C.S.E., L.S.A.

Llanfair, Montgomeryshire, March 12th, 1861.

RE-VACCINATION. The report of the National Vaccine Board for the year 1860 has been presented to the Privy Council. The Board state in this report that, although small-pox has not prevailed in this country during the year to the same extent as in the preceding, it has nevertheless occurred sufficiently to keep alive the alarm which had been excited during the former period; but the experience of the Board, which has now extended over more than half a century, is entirely opposed to such alarm. Although many cases of small-pox, some of them fatal, have occurred among persons reputed to have been vaccinated, it has been ascertained on close inquiry that by far the larger proportion were either imperfectly vaccinated in the first instance, or were vaccinated only in infancy or childhood. The Board have no evidence whatever that the frequent repetition of vaccination is necessary, or even desirable; but they state that many facts tend to render it not improbable that vaccination performed in infancy may lose its protective power after adolescence. On these grounds, they add, re-vaccination at an early adult age would appear desirable. The report is signed by Dr. Mayo, president of the College of Physicians, and by the senior censor; by Mr. South, president of the College of Surgeons; and by Mr. Simon, medical officer of the Privy Council. The Board supplied 219,490 charges of lymph in the course of the year.

Medical News.

APPOINTMENTS.

Collum, R., M.D., elected Physician to the Metropolitan Convalescent Institution.

Harris, Francis, M.D., appointed Assistant-Physician to St. Bartholomew's Hospital, in the room of the late Dr. Baly, F.R.S.

Heslop, A., Esq., appointed Surgeon to the Kirkoswald district of the Penrith Union.

Maclean, William C., M.D., Madras Establishment, approved by the Queen as Professor of Clinical and Military Medicine in the Army Medical School.

Royal Army. The following appointments have been made:—

Fagan, Staff-Assistant-Surgeon M. J. E., M.D., to be Assistant-Surgeon 48th Foot, *vice* Meane.

Maclean, Assistant-Surgeon A., 42nd Foot, to be Assistant-Surgeon, Royal Artillery, *vice* M'Munn.

M'Munn, Assist.-Surg. J. A., M.D., to be Staff-Surg., *vice* Chartres.

Maunsell, Staff-Assistant-Surgeon S. E., to be Assistant-Surgeon 97th Foot, *vice* Porter.

Meane, Assistant-Surgeon J., to be Staff.Surgeon, *vice* Surgeon-Major Dolmage.

Noott, Assistant-Surgeon E. G., to be Staff-Surgeon, *vice* White.

Porter, Assistant-Surgeon J. H., to be Staff-Surgeon, *vice* Fagan.

Smith, Staff-Assistant-Surgeon E. W. K., M.D., to be Assistant-Surgeon 56th Foot, *vice* Taylor.

Taylor, Assistant-Surgeon D. C., M.D., to be Staff-Surgeon, *vice* Maunsell.

Traill, Staff-Assistant-Surgeon W., M.D., to be Assistant-Surgeon 91st Foot, *vice* Watson.

Watson, Assistant-Surgeon R., to be Staff-Surgeon, *vice* Smith.

White, Staff-Assistant-Surgeon L. A., to be Assistant-Surgeon Ceylon Rifle Regiment, *vice* Noott.

To be Staff-Surgeons:—

Adams, R., M.D.
Alcock, N.
Baker, T. Y.
Baxter, P. C., M.B.
Bracken, J. H. N.
Davidson, D. M., M.D.
Fazdowski, B. J., M.B.
Flynn, T. P.
Gillespie, F., M.D.
Godwin, C. H. Y.
Gore, A. A.
Grant, E. B., M.D.
Harvey, H. O.
Heath, R. E., M.D.
Hope, S.
Jones, W. H., M D.
Lamb, H.
Lever, R. C.
Maunsell, T.
Pout, F.
Quinlan, P.
Riordan, R. de B.
Thompson, J.
Wall, W. R.
Walters, J., M.B.
White, G. F.
White, S. G., M.D.
Wills, C. S.
Wilson, F. R., M.B.

Royal Navy. The following appointments have been made:—

Cockin, John, Esq., Surgeon, to the *Emerald*.

Devonshire, Charles J., Esq., Assistant-Surgeon, to the *Calypso*.

Loney, William, Esq, Surgeon, to the *Cumberland*.

Piers, Henry, Esq., Surgeon, to the *Ajax*.

Roe, Peter M., Esq., Assistant-Surgeon, to the *Ajax*.

Tronson, John, M.D., Assistant-Surgeon, to the *Conqueror*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Brett, E. S., Esq., to be Surgeon 1st Administrative Brigade 1st East Riding V.R.

Butler, F. J., Esq., to be Surgeon Hampshire Militia.

Cooper, A., Esq, to be Assistant-Surgeon Inns of Court R.V.

To be Honorary Assistant-Surgeons:—

Blenkinsopp, W. H., Esq., 10th Corps Berks R.V.

Sale, Thomas, L.R.C.P., 1st Isle of Man A.V.

Simpson, G., Esq., 19th Durham R.V.

Wood, W. P., Esq., 24th Lancashire R.V.

DEATHS.

Barratt. On March 16, at 22, Cleveland Gardens, aged 6, William E., second son of J. G. Barratt, M.D.

Bradshaw, William, Esq., Staff-Assistant-Surgeon, at Thurles, on March 9.

Cox. On March 19th, at Rochdale, aged 15 months, Gertrude, daughter of W. Harris Cox, Esq., Surgeon.

Egan, George W., M.D., in Dublin, lately.

Gore, William R., L.C.P.I., at Limerick, lately.

Hensley. On March 16, at 5, Spring Gardens, aged 18 months, Lewis Valpy, youngest son of Frederick J. Hensley, M.D.

Kenny, John B., M.D., in Dublin, aged 27, on March 14.

King, George, Esq., Surgeon, at Calne, aged 42, on March 15.

Pym, Sir William, M.D., K.C.H., aged 89, at 38, Upper Harley Street, on March 13.

Rogers. On March 1, at Enniskillen, Isabella, wife of Robert Rogers, M.D.

Rogers-Harrison. In January, at Cawnpore, from an accidental discharge of fire-arms, Charles C. Rogers-Harrison, Esq., Bengal Horse Artillery, eldest son of *C. H. Rogers-Harrison, Esq., of South Lambeth.

Medical Vacancy. There is a vacancy in the medical staff of St. Bartholomew's Hospital, by the resignation of Mr. Lloyd.

Medicine in the Army. The increase of the Army Estimates in the hospital department was £40,000, and in the medical staff £10,232.

Cork Infirmary. Mr. Beamish has obtained leave to bring in a Bill to authorise the removal of the infirmary for the county of Cork from the town of Mallow to the city of Cork.

Spontaneous Decomposition of Gun-Cotton. Some gun-cotton which had been kept by Dr. Percy for some years in a well-stoppered glass bottle, was found to be decomposed into oxalic acid and gum.

Prize. The Jenner Association for Medico-legal Psychology has put up for competition the answering of the question: "Which is the best method of classifying mental affections, considered in reference to medicine and medical jurisprudence?"

Dentistry in the South Hants Infirmary. The question of electing a dentist to the Royal South Hants Infirmary is postponed for a period of six months. It is now ruled that the candidate shall hold a dental certificate from some legally constituted body. (*Dental Review.*)

The President of the Royal Society gave a soirée at Burlington House on Saturday last. The death of the Duchess of Kent, causing the absence of high government officials, somewhat detracted from the brilliancy of the evening. The unavoidable absence too of Sir Benjamin Brodie also caused a general feeling of regret.

Absorption of Artificial Pigment. At a recent meeting of the Medico-Chirurgical Society of Edinburgh, Mr. Edwards exhibited two microscopic specimens of pigment deposited in the axillary glands of a male subject, who had been tattooed in both arms. The tattooing on the left arm had faded; and on this side the axillary gland nearest the humerus was dark green in one-half, and of the usual colour in the other.

Royal Medical Benevolent College, Epsom. Scarlet fever having broken out at this establishment, Dr. Aldis, medical officer of health for St. George's, Hanover Square, accompanied the visiting committee by request on a sanitary inspection. The disease is of a mild character, and no fatal case has occurred; but, as the present school-room is quite inadequate for the requirements of the scholars, it is hoped that another of larger cubic capacity and better ventilated will be erected as soon as the funds will permit.

Sir William Pym. The death of Sir William Pym, M.D., took place on Tuesday, at his residence, Upper Harley Street. The deceased entered the medical service of the army at an early age, and was appointed Inspector-General of Army Hospitals in 1816, and subsequently Superintendent-General of Quarantine in the United Kingdom. He served in the 35th and 70th regiments, and in a light infantry battalion in the West Indies during the expedition under Sir Charles Grey, and on the staff in Gibraltar, Malta, and Sicily. On returning from Gibraltar, where he had volunteered his services during the prevalence of a destructive fever in 1823, he received the honour of knighthood from his late Majesty William IV. Sir William was the author of several works on medical subjects.

Origin of the Royal Society. It was on the Nov. 28th, just now two hundred years ago, that several eminent individuals, who had previously been in the habit of meeting for the purpose of communicating with each other on subjects of common interest, assembled in Gresham College, and agreed to form themselves into a Society, having for its object the prosecuting of physico-mathematical experimental learning. When they reassembled on the following week, it was reported to them that what they proposed was highly approved by the reigning Monarch; who intimated at the same time his desire to do what lay in his power towards promoting so useful an undertaking. Accordingly steps were taken for the incorporation of the Society under a Royal Charter, that Charter being conferred on them in due form two years afterwards. Such was the origin of the Institution which I have now the honour to address; and to which the world is indebted for the long series of scientific memoirs contained in the one hundred and fifty volumes of the *Philosophical Transactions.* (*Sir B. Brodie's Address.*)

Danger of Sucking Tracheotomy-Tubes. Mr. Erichsen mentions a case in which he performed tracheotomy on a young woman, and was obliged to empty the windpipe by sucking out three or four mouthfuls of blood and mucus. He was rewarded by his patient's recovery. There is no doubt that the surgeon's own feelings should be held of no account where his patient's safety is concerned; but it is well to remember that, in doing this anything but pleasant performance, where the operation has been for laryngitis, the sucker runs some risk. It is not long since a medical man in Paris lost his life from laryngeal disease contracted in this way. Dr. Smith, of Springfield, Massachusetts, was once seriously ill from sucking the trachea of a croupy infant. My assistant, Mr. Shuldham, lately found himself with a badly inflamed sore-throat, from sucking a tube I had put into the trachea of a young woman with acute laryngitis; and, about three years ago, after having sucked thirty or forty times the mucus from a cannula I had inserted in the windpipe of a little girl with diphtheritic exudation in the mouth and fauces, I felt my mouth dry, stiff, and sore, within six hours of doing so, although I had carefully washed my mouth after each application of it to the tube. Within twenty-four hours, I was very dangerously ill, with a condition of throat very closely resembling my patient's. I should not, therefore, be inclined to repeat this process on any future occasion; for, setting aside its nastiness, the double cannula catheter and the India-rubber ball do nearly as well. (Mr. A. M. Edwards in *Edin. Med. Jour.*, March 1861.)

A Yankee's Objections to Shaving. A great deal of time is lost in this foolish practice of correcting nature. There can be no decent shave short of fifteen minutes, including all the pre- and post-liminaries. This makes nearly four days, or *nine working days* in a year, and supposing there are in the United States four millions of shaveable persons, and supposing them all to shave according to the advice of our cotemporary, the aggregate loss to the community would be thirty-six millions of working days, or 98,630 working years *per annum*, nearly enough to employ four thousand men for twenty-five years towards building a Pacific Railroad. Or, to bring the matter down to dollars and cents, calculating only a dollar a day as wages, the annual loss by shaving, not calculating soap, razors, and barber's profits, but simply the loss of time, would approach thirty-six millions of dollars, an amount sufficient, under an economic administration, to defray fully one-half of the annual expenses of our government. But there are physiological objections against shaving. Shaving stimulates the growth of hair most decidedly. In habitual shavers we generally see it grow at least a line in two days—one hundred and eighty-three lines in a year—fifteen inches. Few men's beards will grow to one-half this length in that time; consequently, whatever force of circulation, of innervation, of primary and secondary metamorphosis is necessary to produce that artificially stimulated growth, so much is the shaving individual abnormally and unnecessarily taxed in his heart, his blood, and his nerves.

Anatomy in Germany. Professor Hyrtl, in his preface to a book on "Practical Anatomy," says: "For thirty years no treatise on practical anatomy has appeared in Germany, while during this period a whole library has been published on the use of the microscope; this is a sign of the times, and not one to be lightly disregarded. My apology that the present work forms an exception to the usual custom must consist in the fact, that it has been written for a livelihood." What a contrast, this honest confession to the fulsome adulation of the London imitators of everything German, the parasites who dwell on the tegumentary surface of men, who spend their lives splitting hairs and twisting ropes of sand. Let us imitate the perseverance, industry, and patience of the true German, but not the vapid, superficial, and worthless labours of the class which works for ephemeral reputation and the reward it brings. (*Dublin Medical Press.*)

Wet-Nursing. The following sensible remarks on wet-nursing are taken from the *American Medical Times.* "The practice of employing wet-nurses can but be considered an evil, and one which is destined doubtless to increase in the ratio of our increase in wealth and luxury. What is the remedy? The entire responsibility of resisting its progress rests with the medical profession. We should endeavour to remove the causes of the evil, by inducing mothers to rear their own children by the means that nature has given them. The arguments which may be employed are too strong to be resisted, if kindly, conscientiously, and firmly presented by the medical attendant. If this duty were thoroughly discharged, in every instance, the system of wet-nursing would at once fall into disrepute. In the comparatively few cases where the mother is absolutely disqualified, it is still a question if artificial lactation, in the hands of a competent nurse, might not be preferable to wet-nursing. But admitting that the wet-nurse must be obtained, the physician is still the adviser, and has it in his power to make the selection. And here occurs an important duty, which is almost invariably overlooked; if the wet-nurse has a child of her own, it is liable to be put aside without a care, or even thought, on the part of the employer. The physician should remember that, in providing a nurse for his patient, he is not less responsible for the life of the helpless human being which is set aside, and should insist that it be properly provided for.

Died of Bad Air. The reports of coroners' inquests daily show the great need there is for sanitary teaching. Every week, in the metropolis alone, children are suffocated in bed or under the shawls of mothers. They die, as the coroner is constantly stating, in consequence of inhaling their own breath, which is a compound of carbonic acid gas. They are, in fact, in the same situation as a person who is locked up in a room which is full of the fumes of charcoal. The children are gradually overpowered by the deleterious atmosphere, and die without a struggle, it being thought that they were in a sound sleep. Another instance of the fatal effects of poisonous atmosphere has been brought before the public in the case of William Saunders and Caroline, his wife, who were found dead in the room of a house in a court in Bristol. This accident, if it may be so called, shows to what an extent the soil may be polluted by the escape from gas-pipes. Such a case of sudden death is evidence of the power of evil gases. In a slower but no less sure manner, carelessness in the trapping of sinks and the ill-construction or rotten condition of drains do deadly work in ill-ventilated apartments. We have before alluded to the fact, and again find it necessary to remark that in the cold weather a large number of fatal cases of fever happen in the crowded dwellings of the poor; and these are caused chiefly by the blocking up as closely as possible of all apertures which would afford the chance of ventilation. The houses thus situated become places of pestilence and danger. (*Builder.*)

THE SANITARY CONDITION OF PARIS. Some months ago a clever article on the subject appeared from the pen of M. Louis Lazare, chief editor of the *Revue Municipale.* Some time after Dr. Rigaud impugned M. Lazare's arguments, and endeavoured to show that Paris in 1760 was much more unhealthy than Paris in 1860. In his opinion, the nauseous exhalations emitted whenever the ground has to be dug up for the purpose of repairing a gaspipe do not affect the general health; the smoke from the tall chimneys of the various factories encircling Paris is carried away harmless by the slightest breeze; the vast agglomeration of workmen in and around Paris is the cause of its wealth and magnificence; and, lastly, the streets are wider, and the sewerage infinitely better than in former days. To this M. Lazare replies by reminding his adversary that a hundred years ago the population was scarcely a fourth of what it is at present, that the city was girt with 97 magnificent parks belonging to as many princely palaces, and intersected with the gardens of numerous convents, all tending to furnish a vast supply of pure air. Instead of this, Paris is now surrounded with quarters consisting of narrow streets, containing miserable houses, inhabited by upwards of a million of working people closely packed together, without the slightest attention being paid to their comfort or cleanliness, or to their due share of pure air and sunlight. "In permitting the establishment of numberless factories within the capital," he says, "the administration of the city has done more harm than good to the working classes. During each visitation of Paris by cholera the scourge was sure to reap the largest harvest in those quarters where the working population was most densely agglomerated. For one rich man, the cholera in Paris has always carried off 42 poor people. Hence, therefore, in the interest of the working-classes themselves, Paris ought not to be transformed into a workshop of Vulcan. As regards public security also, the capital should not lose her character of Queen among the cities of France. Beware of letting yourselves be blocked up by a girdle of factories—it would soon become the rope destined to strangle you! was a saying of the Comte de Chabrol. The more these great agglomerations increase, the greater is the attraction they exercise on the provincial towns and country. Unless the evil be stemmed the department of the Seine will be inundated by all the poor of France; and at the beginning of the twentieth century, if the unheard-of and astonishing progression of the last fifteen years is to continue, that department will count 4,000,000 inhabitants, three-fourths of whom will summon you to give them permanent work, no matter at what sacrifice, to provide for their daily food. (*Galignani.*)

JUNIOR MEDICAL SOCIETY OF LONDON.—A general meeting of the members of the several hospital medical societies in union was held in the hall of King's College, on March 12th, 1861; Dr. Conway Evans in the chair. The chairman made a few remarks upon the advantages to be derived from the formation of a students' society, and gave a synopsis of the proceedings that had already been taken for the formation of the Society, referring especially to the exertions of Mr. Ernest Hart and Mr. Alexander Squire (University College) in its behalf, with whom the idea originated. The Honorary Secretary *pro tem.* (Mr. Henry Woods of St. George's Hospital) then read the resolutions drawn up by the Provisional Council. The resolutions were then put from the chair one by one, and, after discussion, passed as follows:—1. The Society be called the Junior Medical Society of London. 2. The objects of the Society be—(*a*) to obtain papers from its members explaining the opinions and practice in vogue at the various hospitals, and treating of all other subjects in the domain of medicine, surgery, and the allied sciences; (*b*) to examine and discuss pathological specimens exhibited by its members; (*c*) by affording facilities for the professional association of students from the various schools, to increase their mutual acquaintance, and to encourage a feeling of sympathy in their general body. 3. The Society shall consist of ordinary and honorary members; the ordinary members shall be such members of existing hospital medical societies in union as are not actually in practice; the honorary members shall be such members of existing hospital medical societies in union as are actually in practice; and those gentlemen who are on the staff of a hospital or medical college shall be *ex officio* honorary members. 4. Only ordinary members shall be allowed to read papers or exhibit specimens, but honorary members have the privilege of taking part in the discussions. 5. Students of hospitals where there is no medical society shall be admitted to the Society by ballot, having been proposed and seconded by two ordinary members of the Society at the previous meeting, on payment of an entrance fee of . 6. As far as possible, the papers be read by the members of the several hospital medical societies in union by rotation. 7. The Council shall consist of two delegates chosen annually by each hospital medical society in union, such delegates being ordinary members of the Society. 8. The Council of the Junior Medical Society shall manage the business of the Society, and be empowered to make such by-laws as may be thought necessary, subject to the approval of the members of the Society at the next general meeting. 9. The officers of the Society shall consist of a President, Vice-Presidents, a Treasurer, two Honorary Secretaries, and Council. 10. The President shall be elected annually by the delegates from among their own number, and act as chairman of Council at the general meetings of the Society. 11. The Vice-Presidents shall consist of one member chosen annually by each hospital medical society in union. 12. The chair shall be taken at ordinary meetings by the vice-president chosen by the hospital medical society which supplies the paper, or, in his absence, by the President of the Junior Medical Society of London. 13. The Treasurer shall be elected annually by the delegates from among their own number. 14. The Secretaries shall be elected annually by the delegates from among their own number. 15. The ordinary meetings of the Society shall be held not oftener than once a month. 16. The meetings of the Society shall be held at some central place, if possible. 17. Only members of the Society shall be present at the general meetings of the Society; and they shall be admitted by printed tickets, to be signed by the secretaries of the several medical societies in union. 18. Each member shall be allowed the privilege of introducing a visitor to the ordinary meetings of the Society; but the same visitor shall not be allowed to attend more than two meetings of the Society in the same session. 19. The expenses of the Society shall be defrayed by a contingent furnished by the several medical societies in union *pro ratâ;* and the rate shall be levied according to the number of new members admitted during the preceding year. 20. No alteration in the rules of the Society shall be made without notice of such alteration having been given a month previously at a meeting of the Society, and the votes of two-thirds of the ordinary members present at a general meeting be recorded in favour of the alteration.

OPERATION DAYS AT THE HOSPITALS.

Monday.......	Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday.	Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday...	St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....	St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.
Friday.	Westminster Ophthalmic, 1·30 p.m.
Saturday.....	St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 8.30 p.m.: Mr. Gay on Abdominal Bands as Causes of Intestinal Obstruction.—Royal Geographical.—Royal College of Physicians, 8.30 p.m.: Dr. Beale on the Structure and Growth of Tissues.

Tuesday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."—Royal Medical and Chirurgical, 8.30 p.m.: Dr. Robert Lee on Uterine Polypi; Mr. Henry Thompson, Case of Elephantiasis; Dr. Sansom on the Action of Chloroform.

Thursday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."

Saturday. Royal College of Surgeons, 4 p.m.: Professor Quekett, "On the Organs of Digestion."—Chemical (Anniversary).

POPULATION STATISTICS AND METEOROLOGY OF LONDON—March 16th, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week....................	Boys .. 996 Girls .. 964	1960	1226
Average of corresponding weeks 1851-60		1788	1427

Barometer:

Highest (Th.) 30.097; lowest (Mon.) 29.200; mean 29.686.

Thermometer:

Highest in sun—extremes (Sun.) 100.5 degrees; (Tu.) 56 degrees.

In shade—highest (Sun.) 57.8 degrees; lowest (Th.) 29.1 degrees.

Mean—42.4 degrees; difference from mean of 43 yrs.+1.4 degs.

Range—during week, 28.7 degrees; mean daily, 16.8 degrees.

Mean humidity of air (*saturation*=100) 91.

Mean direction of wind, Var.—Rain in inches, 0.55.

TO CORRESPONDENTS.

*** All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

Ulceration of the Tongue.—In reference to Mr. Weeden Cooke's paper on "The Surgical Diseases of the Tongue," Mr. S. S. Dyer writes:—

"I cannot but believe that the report has been defective in one particular, and that, under the head of Ulceration, has been omitted the mention of such disease dependent upon the irritation set up by carious teeth, or sharp-pointed stumps. Ulceration arising from such a cause is so common that I can hardly imagine a paper would have been read on this disease in general, without any allusion to this particular variety; and I am sure Mr. Weeden Cooke will pardon my drawing attention to what I fancy must have been an omission of the reporters. During the last fifteen years, I have seen several cases of ulceration, more or less extensive, of the side of the tongue, and, on examining the mouth have so generally found black and pointed stumps of teeth, or sharp edges of decayed ones, that it has become quite natural to look upon such as instances of cause and effect; and I think no case of ulceration at the sides of the tongue can have been thoroughly investigated until the teeth, or their remains, have been examined."

Poor-Law Medical Reform.—The Committee of the Metropolitan Poor-Law Medical Officers, who are now meeting to devise measures for protecting the interests of the Poor-Law Medical Officers, have appointed a sub-Committee to collate facts and prepare a statement, on which to base evidence to be laid before the Poor-Law Committee of the House of Commons. The said sub-Committee will be happy to receive any communications from their Poor-Law medical brethren, detailing any fact within their respective experience, which bears on the agitated question of Poor-Law Medical Reform. All letters to be addressed to the Honorary Secretary, Dr. Robert Fowler, 145, Bishopsgate Street Without, E.C., before April 8th proximo.

A Good Suggestion.—Mr. Fleischmann suggests that it would be well for the Association if "a list were from time to time published of the names of members *in each town*, just as the New Sydenham Society have done. This would enable anyone to tell at a glance those members of the profession who were not members of the Association, and whom frequently a word would induce to join. At present, one is often unable to say who is and who is not in our ranks. Besides, the list would then become a periodical reminder that it is the duty of each member to extend the number, and at the same time the influence, of a confederation which has done, is doing, and, I trust, will do so much towards placing us in a better position. A star affixed to each name might indicate whether the subscription was paid or not."

The London Medical Review.—Sir: In reference to the letter I wrote you last week, disclaiming all connection with the *London Medical Review*, I now beg permission to say that I intended no offence to the various contributors to that journal, amongst whom I number some of my own personal acquaintances. Writing under considerable vexation, I might have used expressions which, by implication were annoying to them; but my sole object was to disabuse the minds of my friends (especially my hospital colleagues) that I had any connection whatever with the journal. To injure any one was farthest from my object. Having also stated in some private letters that the circulation of the *Review* was much exaggerated, I beg to add that, having been shewn the subscribers'-book, the names therein amount to 600, amongst whom are most of the leading men of Edinburgh and Glasgow. As the object of my first letter was to do an act of justice to myself, so I pen this second one to remove any suspicion of injustice done to others. Apologising for thus troubling you, I am, etc.,

Samuel Wilks.

11, St. Thomas Street, Southwark, March 20, 1861.

Dr. Maudsley's letter shall appear in our next number.

Communications have been received from:—Dr. P. H. Williams; Dr. James Alderson; Mr. P. C. Price; Dr. McWilliam; Mr. W. E. C. Nourse; Dr. Maudsley; Mr. Dyer; Dr. J. Barclay; Dr. T. J. Walker; Mr. T. M. Stone; Dr. Wilks; Mr. Fleischmann; Dr. Haughton; Mr. Taylor; Mr. Dunn; Dr. R. Fowler; and Dr. Inman.

BOOKS RECEIVED.

1. Letters from Abroad, from a Physician in Search of Health. By William Bullar, M.D. London: Van Voorst. 1861.
2. On the Admission of Air into Serous Cavities. By Alfred Meadows, M.D.Lond. London: 1860.
3. An Essay on the Use of Nitrate of Silver, in the Cure of Inflammation, Wounds, and Ulcers. By John Higginbottom, F.R.S. London: John Churchill.
4. Additional Observations on the Nitrate of Silver; with full Directions for its Use as a Therapeutic Agent. By John Higginbottom, F.R.S. London: Churchill. 1860.
5. The Anatomists' Vade Mecum. By Erasmus Wilson, F.R.S. Eighth edition. London: Churchill. 1861.
6. A Practical Treatise on Diseases of the Skin in Children; from the French of Caillault. With Notes. By Robert H. Blake. London: Churchill. 1861.
7. Notes on Recent Sanitary Legislation. By E. Lankester, M.D.
8. On the Admission of Air into Serous Cavities. By A. Meadows, M.D.
9. Syllabus of the Lectures on the Causes of Fevers. By T. Laycock, M.D. Edinburgh: 1861.
10. Diphtheria: its Symptoms and Treatment. By William Jenner M.D. London: Walton and Maberly. 1861.

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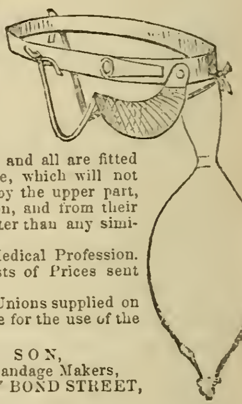

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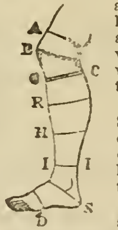

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Practical Observations
ON
SUPPORTING THE PERINÆUM.

BY
GRAILY HEWITT, M.D., M.R.C.P.,
PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL; LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

Is it possible once and for all to settle the vexed question of the proper treatment of the perinæum in labour? It is very certain that the formation of some definitive conclusions on the subject would be acceptable to those—and they are many—who are engaged in the arduous duties of obstetric practice, and to whom a divided opinion among "the best authorities" on a matter of such every-day occurrence as the management of a natural labour is perplexing and unsatisfactory in the extreme.

The following remarks may or may not assist in the formation of such definitive conclusions; they are, at all events, put forward as a *bonâ fide* attempt to arrive at the truth of the matter.

The fact with which we have to deal is, that, in a certain proportion of cases, the birth of the child is the occasion of an accident to the perinæum; the soft parts which surround the inferior termination of the parturient canal are lacerated by the mere mechanical act of stretching which they undergo—in other words, laceration of the perinæum takes place.

With the knowledge of this fact before them, practitioners have been accustomed to look on laceration of the perinæum as an accident always liable to occur; and a certain preventive procedure, known as "supporting the perinæum", has been invented. This has been adopted by almost all the highest obstetric authorities, systematically enjoined by obstetric teachers on their pupils, and most extensively carried into effect by practitioners throughout, it may perhaps without exaggeration be stated, the civilised world. It is only quite recently that the propriety of the practice alluded to has been at all seriously questioned;* and at the present time the almost universal practice still is to endeavour to prevent perinæal laceration by, as it is termed, "supporting the perinæum".

Is the treatment in question proper? Is it based on sound principles? Is "supporting the perinæum" really and truly calculated to prevent laceration of this part during labour? If these questions are to be answered in the negative, much obstetric teaching that has been quietly acquiesced in for many years past will have to be thrown aside; and it will be rendered evident that much valuable time and very much physical exertion have been expended, that much anxious thought has been bestowed, on what was, after all, valueless and to no purpose. If the thing be good, let it be retained; if it be bad, let it be discarded.

Now, however practised, there is this *primâ facie* objection to "supporting the perinæum" in natural labour, that it is an interference with a natural process; that, admirably adapted and contrived as are all the parts concerned in the act of parturition, it is not reasonable to suppose that such contrivance and adaptation should exist in reference to one and not to every part of the process; that the perinæum should be left in this respect destitute and dependent for its protection on something extraneous; viz., artificial assistance. This objection was long ago enunciated by Denman; it could not fail, indeed, immediately to strike any one giving the matter the very smallest consideration. The reply which some would be likely to make to this is, that the artificial conditions modern civilisation has imposed upon us render artificial expedients necessary for the maintenance of health and the cure of disease. I do not consider that this really constitutes a fair or sufficient reply in the present instance; and I should not have alluded to it, were it not for the circumstance that in this very argument some very remarkable obstetric practice has quite recently been based, or, at all events, defended. It must, I think, be conceded that Nature is likely to be adequate to the protection of the perinæum from serious injury in "natural" labours.

But it is not proposed to rest satisfied with this conclusion. The procedure "supporting the perinæum" must be examined, and its efficacy in preserving the perinæum from laceration under all circumstances thoroughly weighed and sifted.

In limine, I would ask what the term "supporting the perinæum" really means? It is not easy to answer this question, however simple it may appear to those who have not thoroughly considered the matter; for, although in the main the plan recommended by various authorities is identical, the reasons given for advising its adoption, and particularly the ends contemplated by its different patrons, are the most dissonant possible. By one authority we are told that the perinæum is to be "supported" on account of its insuring one thing; another authority contemplates a different, perhaps a directly contrary advantage or gain therefrom; all agreeing, however, in the conclusion that, in some way or other, "supporting the perinæum" saves it from laceration. This diversity of opinion as to the *rationale* of the procedure is, to say the least of it, most suspicious. The fact, indeed, appears to be that the practice came first, the theory afterwards; that the practice was established vaguely, and on quite insufficient grounds. The practice having been established, it was of course necessary that each advocate of it should give a reason to justify the same to himself and the public; hence the sameness of the practice, the diversity of the principles on which the practice has been defended.

A great deal of the confusion which exists in the minds of practitioners, and a great deal of the diversity of reasoning adopted by different writers on this subject, appears to have arisen from the use of a term which may or may not be applicable, according to the mode of reasoning adopted, which is consequently meaningless as a scientific expression, and useless and mischievous in its effects on obstetric practice: I mean the term "supporting" the perinæum. The word "support", as applied to the procedure now under consideration, is calculated to enlist popular sympathy in its favour. It being known that the perinæum is now and then likely to give way, what more natural than to presume that "support" is likely to be useful in preventing it? The perinæum—the passive agent in the matter—in danger on the one side of being torn by the head of the child, is defended on the other by the hand of the operator. What could be better than "support" under such circumstances? The word itself, "support", in fact implied, as it will be perceived, a foregone conclusion as to the conservative nature of the procedure in reference to the perinæum; and, seeing that no trouble was taken to ascertain what the operation actually was, and in the absence of anything that could be called an analysis of its effects, it is not to be wondered at that "supporting the perinæum" has been so long in vogue.

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* Allusion is here more particularly made to a very able paper by Dr. Leishman, in the *Glasgow Medical Journal* for January 1860.

The intention in supporting the perinæum is, of course, to save it from laceration. In this all agree; but the particular objects and effects of the procedure are, as before remarked, variously conceived by the leading authorities in obstetrics. The text-books which have in this country been most extensively read and followed of late years are those of Lee, Rigby, Ramsbotham, Churchill, Murphy, and Tyler Smith. In all these text-books, with one exception, that of Dr. Tyler Smith, it appears to be taken for granted that "supporting" the perinæum is an useful operation.

The object of the operation, as gathered from Dr. Lee's instructions, is to press the head forward to the symphysis pubis, and thus prevent "the whole force of the uterine action being directed against the perinæum".

In the *System of Midwifery* by the late Dr. Rigby, the author says: "Our object is not merely to support the perinæum, but to direct the head as much forwards under the pubic arch as possible, in order that the anterior portions of the os externum should undergo their share of dilatation, and thus in some measure spare the perinæum." The object of so placing the hand is to "push the soft parts somewhat forwards, and thus relax them. By this means we not only direct the head against the other parts of the os externum, but avoid the danger of its perforating the perinæum." (P. 112.) Further on (p. 114), Dr. Rigby mentions another advantage derived from supporting the perinæum—that, when at the the last the pains fail, "and the labour becomes very lingering, ... firm pressure applied at the lower end of the sacrum, in a direction forwards, materially adds to the effect of each pain in bringing the head through the os externum, and seems also to excite the patient to make a more powerful effort with the abdominal muscles."

Dr. Ramsbotham, the most strenuous advocate of the practice, does not inform us *how* the operation does good; he makes no attempt to show the *rationale* of the process.

Dr. Fleetwood Churchill states (*Manual for Midwives and Nurses*, p. 42), in order "that you may do so intelligently [support the perinæum], it may be well to ascertain what it is you want to effect"; that what is wanted to be effected in suporting the perinæum is "to offer some gentle support externally against the pressure internally, to guard against the sudden escape of the head, to guide it forward, and at the same time to draw the integuments gently *forward*, but never backward." Here, and also in his larger work, Dr. Churchill altogether objects to attempts to retard the progress of the child.

Dr. Murphy says the object in view is "to obviate the effects of too violent distension"; but he gives no further explanation of the *modus operandi* of the procedure, although the steps of the procedure itself are dwelt upon at some length.

Dr. Tyler Smith considers the procedure objectionable, for a reason to be afterwards stated; and, judging from a passage in one of his earlier writings, evidently mistrusts its efficacy from a mechanical point of view. In his latest work (*Manual of Obstetrics*, p. 307), he expresses himself as follows. He objects to the "constant and sustained support of the perinæum during the latter part of labour"; recommends that the forefinger of the left hand be kept upon the "anterior margin of the perinæum during the last pains, and the right upon the head, with a view to ascertain the moment when the perinæum is distended to a dangerous extent with one hand, and at the same moment to retard the advance of the head with the other. The head should be pressed on passing close to the pubes, so as to strain the perinæum as little as possible."

In the Dublin school, the practice of which is further gathered from the reports of Johnston and Sinclair, and of McClintock and Hardy, the object of the operation is considered to be to retard the advance of the head. These authors do not explain the *rationale* of the process.

Dr. Leishman, the most recent writer on the subject, and a firm opponent of the practice of supporting the perinæum, appears to think it a good thing that the advance of the head should be retarded, in order to save the perinæum, although he strongly objects to the practice of supporting the perinæum *as a means to that end*. He also speaks of the advisability and advantage of directing the head forwards, as having the effect of saving the perinæum; from which it is evident that he considers the ends good, which the supporters of the perinæum have in view, his objection being to the manner in which these ends are attempted to be secured.

The modern French writers, all of whom speak of supporting the perinæum as a recognised procedure, do not explain of its advantages. The same may be said of the chief German authorities.

The objects, effects, or advantages of administering "support", as gathered from the authorities now cited, are:—

By the operation, the head is directed forwards, and the perinæum thus relieved from pressure.

The skin of the perinæum is directed forwards, and the soft parts are thus relaxed.

The progress of the head is to be retarded.

The progress of the head is not to be retarded.

The progress of the head is hastened by supporting the perinæum.

It must be confessed that these conclusions, drawn from statements in the works alluded to, and which may fairly be taken to represent the present state of opinion on the subject, are not a little vague and contradictory. It is evidently not clear to those who uphold the practice of supporting the perinæum what the effects or immediate objects of the operation are. On the one hand, advantages are supposed to be derivable from its direct action on the structures of the perinæum themselves. On the other, the operation is supposed advantageous, because it retards the advance of the head.

It is important, then, to determine what it is which is actually effected by the operation.

[*To be continued.*]

36, Berkeley Square.

Original Communications.

ON THE PATHOLOGY OF SCIATICA.

By Thomas Inman, M.D.Lond., Physician to the Liverpool Royal Infirmary.

I think that I shall be expressing the opinion of many thoughtful men, when I say that the pathology of sciatica is in an unsatisfactory state at the present time. If we turn to Dr. Mayne's *Dictionary* for the meaning of the word, we find it given thus:—"Term for a *rheumatic* affection of the hip joint"; "applied likewise to a *neuralgic* affection of the sacro-sciatic nerve." If we consult Dr. Copland's *Dictionary*, we find no separate article on sciatica, but the complaint is treated of under the head of Sciatic Neuralgia; and the author remarks: "This form of neuralgia was formerly confounded with all painful affections of the hip and adjoining parts .... and the pain was referred to the joint, to the muscles, to the bones, to the tendons, to the nerves, etc., according to the views of the writers." Under the head of *nerves*, he says, "Sciatica is a proof of this want of precise knowledge; for information is still required as to the state of the nerve in this affection." Dr. Watson says, "Sciatica, or pain radiating from the sciatic notch, and following the course of the sciatic nerve, is sometimes an inflammatory complaint, and yields to the remedies of inflammation, bleeding and blistering; sometimes it is plainly a part of rheumatism, and then may be relieved by calomel and opium, or by colchicum; sometimes, again, it results from irritation within the pelvis ..... sometimes it is a purely nervous and neuralgic pain, and then the treatment of facial neuralgia will, *mutatis mutandis*, be applicable to it." (3rd edit., pp. 717-8.) If we put all this into plain English, it means that "sciatica" is a name given to pain about the hip, respecting which our knowledge is not precise.

Can anything like precision be attained? Many things combine to induce us, at the present period, to answer this question in the negative; but we see no reason why a greater amount of certainty shall not be attainable hereafter.

Our current difficulties arise from the one word being employed to express many very different phenomena, and from the insufficiency with which many cases are reported. To have definite notions of the disease and its causes, we must classify the symptoms so far as we can; examine into their concomitants, the condition of individual sufferers, the alliances (so to speak) of the disease, and the means by which improvement seems to have been secured. These will afford us data which may serve as a starting point for subsequent observations. Perhaps I ought to crave indulgence, because I profess to call attention to the "scent," rather than to be an infallible guide to the object sought. I do not so, however; for the keen-nosed hound does not incur censure, though his quest be unsuccessful; the knowledge that there is something to be hunted up, and the pleasure of seeking is, often proves the sportsman's only pleasure.

I propose to inquire: 1. What is the actual locality of the disease; 2. What classes of persons are most subject to it; 3. Under what circumstances it comes on; 4. What are the symptoms which attend it; 5. What are the most successful empirical modes of treatment. We may then deduce its probable nature, and the philosophic line of treatment indicated.

1. The actual locality of the disease varies in different individuals. In none of the cases I have seen, about fifteen, has it been referred to the exact locality of the sciatic nerve or any of its branches; but the patients, while describing it, have invariably mapped out the origin, course, or insertion, of one or more of the gluteal muscles, and with these the "biceps cruris" and the fascia lata are frequently included. The semitendinosus is rarely complained of; but it is by no means uncommon to find the outer origin of the gastrocnemius implicated when the biceps is affected severely. In these latter cases the tendinous structures seem to be the chief seat of the suffering. This is conspicuously the case in a patient under my care at the Liverpool Royal Infirmary, who refers his pain almost entirely to the strongest part of the fascia lata, and acknowledges none in the course of the nerve. This at once takes sciatica out of the list of pure neuralgias, and approximates it to that other class, to which the name myalgia has been given.

2. If we examine those most subject to the disease, we find them to be the old, the gouty, the dyspeptic, those of consumptive family, those who have been much exposed to vicissitudes of temperature, or have been reduced in vigour from any depressing agency. In these individuals we almost always find the muscles flabby, irritable, diminished much in contractile power, occasionally withered or semipalsied, and frequently the seats of pure myalgia.

3. The circumstances inducing an attack of sciatica seem very significant of its seat. In the cases under my notice, it has apparently been brought on by frequent stooping and rising again. Thus, in the case of a lady, it arose from her dusting and polishing the whole of her drawing-room furniture; the pain in this instance came on suddenly, while she was walking out, and was so intense that she almost unable to move the limb for four hours. After one buttock got well, the other was attacked. In the case of an elderly gentleman, the attack was determined by his standing for many hours in the cold, superintending workmen, himself staking out certain boundaries, and frequently using the pick-axe. He was at the time recovering from a severe illness, during which he had had an acute attack of myalgia in Poupart's ligament. In former years he had experienced four severe fits of gout. Of four cases at present under my care, one is a fireman, another a dock-gateman, another an ostler, and another a foundryman and moulder; and in all the attack can be referred to the excessive use of the gluteal and crural muscles. So far as I have seen, patients appear to get well by remaining quiet; but they tell you that they are not cured, for the pain returns *as soon as they begin to walk*. This at once seems to imply that there is some connection between the pain and *motion*, and leads to the inference either that its seat is in the organs of locomotion, or that when these are exercised they injure neighbouring parts. As the nerve is the part most likely to be affected, we ask ourselves whether it is possible that it can be bruised by the contractions of the glutæus; and the answer is in the negative; for if it were, we should have in the foot and leg a sense of pain and tingling, such as we have in the arm and hand when the ulnar nerve is struck. When a man strikes his "funny bone", he tries to relieve the pain produced by squeezing the inner part of the hand; when a man has sciatica, he places his hand on the hip to relieve the pain, and leaves the foot alone.

Yet we do have sometimes the symptom of "pins and needles" in the foot complained of in sciatica; and this leads us to the belief that the nerve must then be implicated. I was consulted respecting a case of this kind a few days ago, and the history I elicited was sufficiently interesting to deserve detail. The gentleman was a large made, healthy-looking, burly man, a captain in the army, and between forty and fifty years of age; but he had seen much hard service in the West Indies, the Bermudas, Gibraltar, and Greece, and had suffered severely from the hardships attending the Crimean war, during which the sciatica first came on, attacking the left buttock, and in the end implicating the whole pelvis, anteriorly and posteriorly. This affection was attended by a swelling of the leg, apparently analogous to phlegmasia dolens. He recovered from this, but did not regain his usual condition, which, he said, had never been a strong one, notwithstanding his good looks. Latterly, he had been subject to faintness, general *malaise*, indigestion, languid circulation, etc. His duties generally kept him to his desk; but he had been recently obliged to do more active work, which involved much walking, standing, and stooping to examine stores. This brought on lumbago and sciatica; the first had subsided, the latter still remained, although his occupation was once more sedentary. This seemed to involve the idea that there must be some cause keeping up the irritability of the gluteal muscles; and, as the foot was affected, I imagined that the nerve was obnoxious to the same thing. On closely questioning the patient, I elicited the fact that, when writing, he always sat on the left buttock exclusively, and thus very effectually squeezed both its muscles and the nerve against the bone; and, as the former were very soft and compressible, it was clear that they could not protect the nerve from external pressure so fully as if they were firm. A careful sifting of the symptoms now proved that the sensations in the foot were general after sitting; those in the sciatic region came on after motion. I have, in my own person, often felt what I feared might be the preliminary signs of sciatica; but I have latterly been able to connect them invariably with a prolonged use of the pen, which involves much stooping forward and pressure upon the flexors of the thigh, etc. It is generally noted that sciatica is induced by damp and cold weather. In this and some other respects, it seems to be influenced by the same causes which bring on the phenomena described as muscular rheumatism.

4. The symptoms accompanying sciatica are not so fully described by writers as could be wished; but we infer that there are generally signs which point to a nervous temperament or to a gouty or rheumatic diathesis. Dr. Copland says, "In some cases the accessions of suffering are followed by *convulsive or trembling movements of the limb, by slight numbness or partial palsy, and an attack generally leaves the limb emaciated, flabby, and weakened.* When the attack has been very severe, or of long continuance, lameness, or dragging of the leg, great emaciation of the limb, a weakened, or partially paralysed, state of the muscles and disorder of the digestive organs are experienced for some time afterwards." (I have italicised a sentence, as I shall have to make special reference to it shortly.) In a subsequent paragraph, a case is noted where the pulse was quick and irritable; in it the pain is referred to the middle of the rectus femoris, and spoken of as crural, and not sciatic neuralgia. In all the cases which have come under my own notice there have been well marked symptoms of constitutional debility.

Amongst those symptoms which are not generally present, we must include sensations in the leg and foot, similar to those felt in the hand when the ulnar nerve is struck. The absence of these signs seems to be of great importance when we take into consideration the phenomena attending the application of a direct irritant, etc., to a nerve. If we employ simple pressure to the sciatic or popliteal nerve, as by prolonged sitting in a certain posture, we have—1, powerlessness to move the muscles of the foot, and cutaneous insensibility to external impressions; 2, after the pressure is removed, we have a strange pricking sensation in the foot. The portion of the nerve we have squeezed is not complained of at all. Again, if a nerve be divided, the act of division produces a sensation of pain referred to the parts to which it is distributed, and not to the spot which is cut; and if, after amputation, any inflammatory or other affection implicates the divided ends of the nerves, pain is not referred to them, but to the limb which was removed. Still farther, if we lay bare the sciatic nerve of a frog and irritate it, we have certain contractile phenomena in the muscles to which it is distributed; and if the frog could speak, we should expect to hear a complaint of pain in the foot and leg.

Now, if sciatica be an inflammatory affection of the neurilemma, this must be thickened, and, as a necessary result, the nerve must be squeezed; and if the nerve be squeezed, partial paralysis and anæsthesia of the foot must ensue, and the sensation of pins and needles will be the proof of the pressure being diminished. Or, if sciatica be a real nervous irritation, we should still have as a symptom muscular contraction or modified sensation in the parts to which the nerve goes, or from which it comes, and not solely in the spot irritated. There is then a *primâ facie* difficulty in considering sciatica to be purely a nervous affection dependent on some physical change in the nerve.

5. The empirical means found most successful in the treatment of sciatica are—*a.* Such tonics as quina and steel; *b.* Such warm medicines as spices, guiacum, or turpentine; *c.* Such local stimulants as blisters and rubefacients; *d.* Anodynes used locally; *e.* Firm strapping to preclude motion of the limb; *f.* Colchicum. On the other hand, low diet, purging, and mercury, have been proved to be prejudicial.

Two hypotheses have been put forward to explain the phenomena of sciatica—one, that the affection is rheumatic; the other, that it is neuralgic. I will not attempt to discuss them; for both words are so vague in their signification that they bring us no definite ideas. I propose no new theory, but would call attention to a series of facts which possess much significance.

a. The locality of the pain is referred by the patient to muscular and fibrous parts.

b. In describing it, the same movements are made as when myalgic pains are complained of elsewhere.

c. The nature of the pain resembles that of certain forms of myalgia.

d. Myalgic pains elsewhere are common when sciatica is present.

All these point to the muscles and tendons or fascias as being very generally, if not invariably, the seat of the pain.

We have next to ask ourselves whether the muscles are ever the seats of such severe suffering as attends sciatica. We first note the fact that in sciatica the muscles are more or less weakened, withered, or palsied; and we are led to inquire into the symptoms which attend wasting palsy. I have already recorded one case of muscular paralysis which was attended with acute and persistent pain (*Myalgia*, p. 68). This is by no means a rare occurrence; for Dr. Roberts, in his interesting work on this subject, remarks, "Pain is by far the commonest of the symptoms . . . . it is (sometimes) sharp and lancinating, shooting down in the course of the nerves, having all the character of neuralgia . . . . . resembling, and often called rheumatic pain. . . . . *In several instances it marked the outset of the disease, and passed away as the atrophy set in in good earnest.*" (P. 119.) Compare the two sentences from Dr. Roberts and Dr. Copland which are in italics, and their connexion seems to be well marked. Again, we read in the same authority "that unusual sensitiveness to low temperature is a prominent symptom of wasting muscles; and two cases are mentioned, one where there was a sensible falling off of muscular power in the cold; the other where power was partially restored by warmth. In this we see some glimmering of the reason why damp cold so frequently induces sciatica—it makes weak muscles weaker.* In the second case which Dr. R. details, there was, in addition to other symptoms, a partial palsy of the right leg—great sensitiveness to cold; and Dr. R. remarks "the only ailment he complains of is *neuralgia of the right sciatic nerve*, which now and then torments him." It is true that other cases of palsy are given in which sciatica did not occur; but this is no more than we should expect; for the palsy, Dr. R. tells us, often runs its course without any pain. It must be noted, however, as a fact of considerable importance that the effect of galvanism greatly varies; in some patients, says Dr. Roberts, it produces such severe suffering that they cannot endure it; in others it produces scarcely any pain. This distinctly proves that while some partially withered muscles contract painlessly, others cannot contract without producing intense suffering.

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* It is a fact of great interest, and one which materially complicates the difficulty in assigning the pain in sciatica to any one part, that severe cold which produces facial neuralgia in some will pro-

We next refer to Dr. Copland (*Neuralgia of Muscular and Membranous Structures*, vol. ii, p. 881). We find "in true neuralgia of the muscles, the pain is much more acute than in rheumatism, and it recurs in frequent exacerbations. . . . . *In all the cases I have seen the remissions were attended by weakness or partial palsy of the muscles affected.*" "In two cases where the muscular parts were most acute in the thighs, and were attended by occasional cramps, irregular action, etc., *amounting to partial paralysis*, extensive organic change was found in the cord." Here, again, we see that semi-paralysed muscles are occasionally the seats of severe pain.

We now turn our attention to the condition of the muscles in the gouty diathesis, and we find in it that there is a great tendency to irregular muscular contraction, attended with more or less pain. Painful palpitation and the pain of gout in the stomach are, perhaps, the best evidences of this. There is one form of this disease often spoken of as poor gout, in which the muscles are flabby, weak, and withered; and it is in this state that sciatica is generally found as a symptom. It comes on very suddenly, is very intense while it lasts, and speedily goes off. Such an attack may, however, be independent of gout altogether.

Of the rheumatic diathesis, I will only say that an immense number of cases put down under the name of rheumatism are simply myalgic, the effect of over-exertion in weak muscles; consequently, there can be no surprise if, with myalgia elsewhere, it exist in the gluteal region too.

Of rheumatic gout I cannot say much; it certainly is attended with very great irritability of the muscles in the neighbourhood of the affected parts, and their contraction is eminently and acutely painful; yet I doubt whether this fact can be made available for the explanation of the pain of sciatica, when there is no reliable proof of the presence of this rheumatic or gouty affection. Of the probability of sciatica being a pure neuralgia, having its seat in the nerves themselves, or being dependent on some form of pure nervous disease, I will not express an opinion; nor will I say anything of the likelihood of its being a sympathetic pain, excepting to express a doubt whether we have any instance in which such pains are brought on by motion of the part itself, without any appreciable alteration of the condition of the distant organ in sympathetic connexion with it.

The conclusion we have arrived is, then, simply this—that there is good reason to believe that sciatica may be, and very frequently is, dependent upon muscular contraction (when speaking of the muscles, I consider that their fibrous portions are included) in enfeebled, unusually irritable, or imperfectly palsied muscles, and that the pain often is in direct proportion to the weakness of the muscular fibre.

This being so, theory would dictate what experience confirms; namely, that the most appropriate treatment is rest from motion, warmth, anodynes locally, strapping to give support and encourage heat, and tonics to improve the constitutional vigour.

The influence of these considerations upon treatment is, therefore, small—the effect they must have upon our prognosis is far greater. If it be true that the pain may be the first symptom of muscular decay, we can scarcely hope for a speedy and complete cure. If, on the other hand, the muscular decay be a legitimate and certain result of the pain, our prognosis will be guided by the duration and severity of the suffering. In any case, however, of severe and enduring sciatica, especially in delicate or aged individuals, we must be prepared for the probability that it may eventuate in some withering of the muscles of the buttock or the thigh.

ON THE CARBUNCULAR TYPE OF DISEASE: ITS SEPTIC CAUSES, AND ANTISEPTIC TREATMENT.

By David Nelson, M.D.Edin., late Physician to the Queen's Hospital, and Professor of Clinical Medicine, Birmingham.

(*Read before the Midland Medico-Chirurgical Society.*)

It is not my intention, in the presence of the members of this society, men of learning, daily engaged in the practical exercise of their profession, to enter upon any elementary description, or history of the class of disorders now brought under consideration. I neither mean to give a lengthened statement of symptoms, nor a review of the various remedies that have been employed by divers persons from time to time; for with these matters our fellow members must be familiar. I only desire, in the present paper, to draw special attention to the general principle which has forced itself on my notice during a protracted observation of these painful eruptions, and to the therapeutic deductions consequent upon the acceptance of such principle. The principle is this; that all these forms of morbid action are referrible to a septic source, and, therefore, that all treatment, to be demonstrably successful, must be of an antiseptic character.

In order to evolve clearer illustrations of such a view, it is necessary to fall back upon the old doctrines of humoral pathology—doctrines which have resumed so refreshened a vitality in these latter days; not, let us rejoice, by the mere fluctuations of what may be called medical fashion, but by the more solid and enduring acquisitions of chemistry and the other allied sciences of the art of healing.

So generally, or rather universally received, indeed, are those doctrines at the present time, that I do not feel myself called upon to prove their truth; but only to adduce certain illustrations of the pathological processes upon which they are founded; so that, by analogical reasoning, the similarity of action may be recognised between the onset and progress of boils and carbuncles, and the onset and progress of those other morbid changes, where the operation of the laws of blood-poisoning are almost as obvious to the eye of the mind as the application of the spark and the explosion of the gunpowder are obvious to the eye of the body.

Thus, to begin with the instance of a common cold, as

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duce facial palsy in others; that in one it will give rise to sciatica, in another to paraplegia, in a few to tetanus, and in many to muscular and nervous phenomena combined. Thus, Dr. Roberts says: "in sixteen cases (of wasting palsy) the atrophy arose from cold." A case is recorded where hand and forearm is wasted by plunging the member when perspiring into snow; others are referred to; and then he adds: "Cases arising from cold are subject to neuralgia and rheumatic pains in the affected parts (the muscles?), either at the onset of the atrophy, and ceasing when this has fairly set in, or continuing throughout its progress" As might have been expected, in more than one instance the disease, wasting palsy, is alleged to have risen from "*cold combined with fatigue.*" This last is very frequently indeed the cause of an attack of sciatica.

it is called. We have, from exposure, not to mere lowness of temperature, but to certain obscure atmospheric causes, a greater or less depression of the nervous energy, accompanied with a sense of cold, and a suppression or retention of certain excretions. These, under the vital reaction that is sure to arise if any power be left at all, will produce either the general expulsive effort of sweating or diuresis, and the like, or else a localised disturbance; according to the idiosyncracy of the patient, or the condition of his different organs. So, out of a given number of persons thus exposed to the same causes, one shall have a discharge from the eyes and nose, with oppression of the head; another shall have sore-throat; a third bronchitis; a fourth pleurisy; a fifth rheumatism; while a sixth has merely a few prickly serous blotches on his lips, and so an end of the brief commotion. These are non-communicable forms of disease; but, when we come to the communicable, the process becomes still more apparent. Thus, in measles, we have the entrance into the system of a specific poison, which forthwith runs a specific course—a poison that first depresses the vital powers, producing shiverings, anorexia, and vomiting, followed by reactionary symptoms, determining the disease more especially towards the skin, the lungs, and the kidneys. Proceeding after the manner of a ferment, the exciting poison and the fermentible something in the blood are eliminated together never to reappear. In scarlatina, we have a process altogether similar, in rise, progress, and decline. In paludal fever, we have like results, proceeding from the marsh miasm; but no future immunity from the disease, which may recur again and again in the same person, if exposed to the same circumstances. In typhus, we recognise, again, a specific poisonous influence, definite and unmistakeable in its effects; arising, not from any one precise cause, such as debility, or starvation, or filth, or putridity; but from a something of which the necessary elements are (except when proceeding from direct infection) as over-crowding of human beings, bad ventilation, poor diet, and filth of a chronic and peculiar kind, such as is due to the non-change of body clothing, including that of night and day. This poison, entering the system and producing a depression of the deepest nature, likewise acts after the manner of a ferment, with disintegration of the blood, and disturbance of every vital organ, till, in due time, it is eliminated; though still, like the paludal miasm, ready to attack the same body again and again, if placed under its influence.

The secret cause of malignant cholera acts after the same fashion; but, in its worst shape, allowing of little or no reaction, so far as I have ever seen, and I saw a great deal of it, both in 1832 and 1848, when I closely watched it in Edinburgh. The action of the variolous poison is still more clear than that of any of the above. Introduced by direct inoculation into the blood, it next shews, with unvarying certainty, the regular procession of events—beginning with the depression, the shiverings, and the nausea, followed by the reactionary fever, and the outbreak of the pustular eruption, containing a specific matter, which is the direct re-multiplication of the originally inoculated particle, ready, in each of its atoms, to reproduce the same series of results, under the same given circumstances. Here, as in some of the others, we have an immunity from future attacks, showing that some latent element, or property of the constitution has been expelled or annihilated in the course of the disturbance, not again to revive.

Lastly, and clearest of all, we have the syphilitic virus, with its manifestly visible existence, specific nature, and specific effects. Introduced into the frame at one point or another, we have, without any accompanying fever, the first local effect; then the creeping of the virus through the absorbents from gland to gland; next its entrance into the venous channels, and its diffusion through the general mass of the blood; falling with destructive force, through that medium, first upon certain localities or tissues more immediately open to its invasion; but finally involving every portion of the frame, including even the hair, nails, and bones, in its ravages; so that, without treatment, we could not say where or when such ravages might stop, until death, in its most horrible and repulsive form, had closed the scene. Here we have reproduction of the virus; but no definite or limited course, either in place or in time, as to the progress of its poisonous corruptions; for the morbid action would go on, so far as we know, until nothing were left to be acted upon. Neither is there any immunity from future attacks; though, happily, medical science has discovered antidotes to its virulence, without which its evils, directly or indirectly, might have wrought a degeneration of the entire human race.

So much for the general forms of blood-tainting. I now proceed to make a few observations upon that poisoning which results in the carbuncular type of disease, including within that category the soft malignant pustule, the boil, and the carbuncle. I am inclined to accept them all as the expression of one single poison, though varying in its amount and in its virulence, and modified by the constitution within which it is generated or into which it is introduced, as well as by its anatomical site. My simple reason for such belief is, that the eruptions are found to take place when either septic matter is retained or introduced into the system, or the body, in whole or in part, is suffering under putrid disintegration. Thus, by direct experiment, as well as by accident, it has been found that the introduction of putrescent matter into the subcutaneous cellular tissue has given rise, in some instances, to diffuse malignant suppuration; and, in others, to the appearance of a little irritating pimple, followed by the hard fibrinous exudation, and all the familiar advances of a boil or carbuncle, including the hard base or core, the bluish red apex, and the sordid bloody sanies and foul pus, so characteristic of the disease, and so well illustrated in the persons of skin-dressers, etc. Again; they have been found to appear in the course of sundry depressing diseases where a putrid tendency has set in. In malignant measles we have the large blains filled with bloody serum of a reddish blue hue. In puerperal fever, and typhus, and malignant small-pox, we have the series of boils, tending to gangrene. In the true plague and yaws, we have the highest exemplification of constitutional disease of a carbuncular type.

The plague, in its very essence putridity itself, if one may so speak, consisted, when any reaction took place at all, of the development of monstrous black boils and carbuncles throughout the frame, which exploded not only on the surface, but within the tissues of the liver, bowels, and other internal organs. The bodies of the dead are described as teeming with balls of malignant suppuration; and the recovery or death as depending upon whether the vital forces could bear up under these expulsive efforts, or might succumb under the morbid pressure. Then, again, we have plentiful proofs of boils and carbuncles appearing from the absorption of putrid matters within the body itself, as in retained menses or lochiæ, or deep-seated putrid suppuration, decayed teeth, and also from carious action of the different bones of the body.

In short, in almost all cases in which they occur, I think we have pretty good evidence of septic matters being within the body. Those in whom they show themselves are usually debilitated constitutionally; and when they do take place in full plethoric habits, we have some right to infer, by analogical reasoning, that such a habit, under some temporary depression, has had some septic matter introduced from without, or that the *effete* tissues of an overgrown frame have undergone some morbid change or decomposition, without such products being expelled through the natural channels of waste.

Where such type of disease has sprung from unknown or undetectable causes, analogical reasoning would still entitle us fairly to infer that some septic cause had been at work, when we see that it is the obvious outward manifestation of such a cause in so many instances patent to observation. The inference in such case would be that there had occurred, under unfavourable circumstances, and in a part of the body not having a free outlet, the deposit of some decayed blood, or other solid or fluid, of so acrid a nature, as not only to give rise to the uncomfortable features of boil or carbuncle, but also to act as a leaven within the mass of the blood, if its vitality were low, and so produce a series of crops, one after the other.

Where a doubt of the nature or cause existed in this or any other disease, a further test would be brought to the aid of our analogical reasonings in the shape of a specific treatment, founded on the specific theory; and in this instance it happily clinches the argument, and agrees with all the facts of the case. For, in all time since it has been known, the Peruvian bark, with its auxiliaries, has proved, by its antiseptic tendency, of the greatest possible avail in all the diseases to which I have specially alluded. In malignant measles, in scarlatina and paludal fever, in typhus, malignant smallpox, and in the plague itself, is not Peruvian bark the sheet-anchor of successful treatment? In deep-seated putrid abscess, and in caries of the bones, is it not of the highest service? and do we not all remember in our boyhood days how the bark and the port wine constituted the essence of the constitutional treatment? So supported by the facts of ancient experience and one's own observation and reasoning, it might almost be felt unnecessary to urge these doctrines on the minds of professional hearers; but the truth is, that there are some minds (not that I mean to say any such are now present) who doubt everything and cleave to nothing, who seem to delight in uncertainty, and to think that one argument or view is just as good as another, except that other amount to a mathematical demonstration; and sometimes not even in that case. The entrance within the portals of the medical profession affords, of course, no guarantee against the possession of this frame of mind, though the nature of the studies is highly calculated to correct it; and hence, in the maze of medical literature, so many proposals of an entirely opposite nature to meet cases almost identically the same. In this very disease, of so septic and cachectic a type, there have not been wanting advocates of the simply purgative, the depleting, and the mercurial plan of treatment —a plan so diametrically opposite to the tonic and antiseptic mode followed by others, and advocated in this paper. There are also others—and no mean authorities either, in other respects—who seem to consider that nothing at all is required to be done in such cases beyond opening the tumours and giving bland diet. It is these unreasonable discrepancies amongst the members of the profession itself that give so much encouragement to all the contradictory quackeries of the day, and afford food for that horde of camp-followers that are ever hovering around the march of scientific medicine. As to this expectant plan of simply opening the abscesses and practising starvation, or something akin to it; I believe it to be applicable to those exceptional cases only in which some accidental poison has got implanted within a vigorous and plethoric constitution accustomed to high luxurious living, and therefore gaining strength, rather than otherwise, by an apparently depleting procedure. Such a body, deprived of rich animal foods, strongly spiced sauces, feeding beers, and inflaming wines and spirits, can live perfectly well upon its own interstitial deposits for a time, and, by thus getting rid of much effete matter, and of sundry chronic congestions, that had formerly clogged its actions, may be all the more equal to the task of expelling the causes of disease. But, with such exception, I am convinced that, in this type of disease, the most active measures are required for the expulsion and neutralisation of the acrid poison, and for the maintenance of a vigorous vital reaction. Without this, we may have crop succeeding crop, and exhausting the body to the last degree; or we may have abortive efforts at eruption, while the general constitution is suffering under an unaccountable debility and depression, with headache, anorexia, nausea, and faintness. The external manifestation of boils relieves this state of body, not because it is a wholesome manifestation *per se*, but because it is a proof of effectual reaction.

At this very time, while I speak, I have a patient under treatment who affords an apt illustration of this latter position. He had been ill for a long time before; and yet, with exception of a slight cough, there was nothing physically tangible—no pain, no foul tongue, no tenderness of stomach or abdomen, no pectoral dulness, no roughness of respiration, no irregularity of bowels, no deposits in the urine, no unnatural sounds at the cardiac valves; yet there he lay prostrate, with no appetite, no capability of exertion, and constant nausea and sinking both of body and spirits. He is pale, thin, and soft in flesh; and the action of the heart was so feeble that the first sound was scarcely discernible over the aortic valve. He had full doses of quinine and steel administered to him, along with powerful draughts of cardamoms and ammonia, light strong diet, and port wine negus; and the result has been a manifest increase of the action of the heart, accompanied with an eruption of boils. An exactly similar case occurred to me some years ago, in a man who is now perfectly well and able for all his duties.

But, although carbuncular outbursts are to be considered favourable under such circumstances, they are not always critical; for the contained matter is of an acrid nature; and its resorption is liable to give rise to fresh morbid processes. Therefore it is desirable, when the surgeon or Nature shall have laid open the boils or carbuncles, to see that they be emptied as much as possible, and an open drain maintained; while the patient also undergoes the decided medical treatment already indicated. When they have been comparatively soft, I have usually employed full doses of the compound tincture of cinchona, with the sulphuric and muriatic acids; and when they have been harder, instead of the acids, I have used the iodide of potassium. Under the action of the latter agent, the fibrinous exudations have more rapidly been absorbed, while the usual outbreak of iodic pimples has occurred; but, under the employment of either of the agents, I have always found that, obstinate as the disease may have been, no more boils have shown themselves; and this I view as the master fact of the whole argument. The more complete proof of the efficacy of the tonic and alterative treatment has been afforded to me by the further fact that where the crops seemed due to the persistent generation of putrid matter within the body, as in caries and the like, such crops were stayed during the exhibition of the medicine—while they reappeared upon its being stopped, not being arrested completely, until the healing of the burrowing ulcers gave evidence of the arrest of the carious action—and the reestablishment of the constitutional integrity.

Having thus advanced these observations with the view of upholding, in the first place, the humoral doctrine of blood-tainting; in the second place, the extreme probability, not to say certainty, of the carbuncular type of disease arising from a septic taint in the blood; and, in the third place, the necessity of counteracting such septic taint by an antiseptic treatment; I now proceed to adduce a few cases, not in tiresome detail, but only in so far as they illustrate the particular points upon which

I have insisted. To give more only were to indulge in useless digression and vain repetition. They are most of them very brief, simply because the treatment proved rapidly successful. Let me also add, that while the one essential line of treatment was carried out in each case, some other agents were used incidentally for incidental symptoms, such as must ever occur in so complicated a structure as the human body; but none of them so as to influence, or at least invalidate, the main plan.

Case i. Mr. A. H. first consulted me on 23rd April, 1855. He had been for upwards of two months troubled with a succession of large hard boils, which had been poulticed, and opened again and again; whilst his bowels had been acted upon by saline cathartics. Under this system they continued to reappear. I advised a continuance of the poultices, and the use of the lancet to existing boils; and prescribed for internal use, ten grains of the iodide of potassium, with two drachms of Huxham's tincture of bark, and half a drachm of tincture of hyoscyamus, three times a day.

On May 3rd, all the boils were rapidly healing up, except a very large one, which was treated by iodine applications. No fresh ones had shown themselves; but there was a profuse eruption of little pustules over the skin, such as is ordinarily caused by the iodide. Its further use was therefore stopped, and he had the tonic tincture as before, with muriate of morphia, and muriatic acid.

May 10th. He was proceeding favourably, with no further eruptions.

May 17th. He was quite well, with only a little hard swelling over the seat of the large boil. I can attribute the speedy arrest here only to the bark and its adjuncts.

Case ii. E. W. was seen by me on Oct. 13th, 1856. He was a delicate young lad of smoky unhealthy complexion, thin and weakly. Some time before, he had injured a finger, and a severe whitlow was the result. From his timidity, the opening of this whitlow had been delayed, and when the opening was effected, the wound was offensive, and would not heal; but, in addition, there had appeared on various parts of the body, dark hard boils, which were very painful. At this time, the bone of the finger was necrosed, and its removal was advised, as well as the opening of those boils that were pointing.

His bowels being very much confined, he took two drachms of compound tincture of senna every night; and three grains of iodide of potassium, with a drachm of compound tincture of bark, and four drops of tincture of opium, thrice a day.

By the 20th, the finger was healing, as well as the boils that had been opened, and no fresh outbreak of the kind occurred. He subsequently took the bark with sulphuric acid, and regained his usual health. Here, I think, we have, in regular succession, carious abscess—absorption of putrid particles into the blood of an already sickly subject—production of boils, and their arrest by the treatment.

[*To be continued.*]

The Dublin Medical Schools. There are 806 Students of Medicine and Surgery attending Lectures and Hospitals in Dublin this winter; 1,237 Students in London; and 1,156 in Paris—being a larger number than is usual in all three capitals. The Students of Medicine in Dublin 1860-61, are divided among the various Schools as follows:—The Ledwich School, 228; College of Surgeons' School, 220; Cecilia-street School, 101; Trinity College School, 100; Richmond Hospital School, 97; Steevens' Hospital School, 60; total, 806. Of the 100 Students attending the Trinity College School, 80 are Graduates or Undergraduates in Arts. (*Dublin Hospital Gazette.*)

ON THE OCCURRENCE OF DEPOSITS OF CRYSTALLISED PHOSPHATE OF LIME IN HUMAN URINE.

By William Roberts, M.D., Physician to the Manchester Royal Infirmary.

Dr. Hassall seems, so long ago as 1852, to have satisfied himself that phosphate of lime appeared occasionally in urine in a crystalline state; for, in his little work on the urine, the eighteenth plate contains a delineation of "crystals of phosphate of lime," and the date appended to the drawing is August 1852.

In the beginning of last year, Dr. Hassall read a paper before the Royal Society, "On the Composition and Pathological Importance" of the calcareous phosphates occurring in the urine as a spontaneous deposit of stellar crystals. He found these crystals to consist of biphosphate of lime; he also considered them of more frequent occurrence and of far graver signification than the triple phosphate of ammonia and magnesia.

My attention had been directed to these crystals with curiosity for some years; and recently I have had an opportunity of subjecting them to chemical analysis. Before the publication of Dr. Hassall's observations they were universally considered to have the same composition as the prismatic phosphate, which contains ammonia and magnesia, but no lime; and it was believed that the phosphate of lime never assumed the crystalline state in urine, but was always deposited as an amorphous sediment.

The forms of the crystals in question present considerable variety; but they are, nevertheless, easily recognised by the practised eye. Good figures of them are given by Dr. Beale in his twenty-second plate, although erroneously designated "A Rare Form of Triple Phosphate"; still better ones have been published by Dr. Hassall in the little work already alluded to; also in the *Lancet* for 1857, as well as in the paper communicated by him to the Royal Society, January 1860.

Dr. Bird had evidently seen these crystals, and he gives imperfect figures of them. (Fig. 45.) He held them to be of the same composition with the triple phosphate.

In the atlas accompanying Lehmann's *Physiological Chemistry*, Funke gives two capital plates in his twelfth plate, but he names them uric acid.

The prevailing appearance is that of crystalline rods or needles grouped round a centre, so as to form a more or less perfect star. Some of these stars are of great beauty, as large as the finest seen of uric acid, and not unlike them, except in the absence of a brown colour. Sometimes, the rays of the star are so close set that the appearance of a rosette is produced. Again, not unfrequently, the crystals, instead of radiating equally in all directions from the centre, shoot out in one direction only, so as to form a fan; or, in two directions, on opposite sides, so as to present a rude resemblance to a wheat-sheaf. Sometimes, too, the rods lie confusedly across each other, or crystallise round hairs or fibres. Frequently, the rods are wedge-shaped, and thicker at their outer extremity than where they join in the centre. Other forms are club-shaped and bottle-shaped, and abundantly marked with lines of secondary crystallisation, reminding one of the same appearance on the hexagonal plates of cystine.

In a case of diabetes recently under my care, these crystals formed a constant deposit. The urine had been brought down by appropriate treatment to fifty ounces a day, and the patient was steadily gaining strength and flesh. The deposit was often mixed with oxalate of lime, and sometimes with uric acid; but never, except as the result of putrefactive decomposition, with the triple phosphate. I managed to collect about two grains of the crystals in a pure state, unmixed with oxalate of lime or triple phosphate, and subjected them to examination, as follows :—

1. Treated with caustic potash they evolved no ammonia; nor were they in any way affected even by boiling in the caustic alkalies.

2. They dissolved slowly in acetic acid without effervescence. On adding oxalate of ammonia to the solution a precipitate fell which, two days after, presented the familiar forms of minute octohedra of oxalate of lime. The supernatant liquor, treated with ammonia and phosphate of soda, yielded no precipitate.

3. The mineral acids dissolved the crystals rapidly, and ammonia added afterwards in excess threw down an amorphous sediment.

They did not lose weight by drying at 212°. When incinerated they lost weight to the extent of twenty-six per cent.

The first experiment shows the absence of ammonia; and the second shows that the base is lime unmixed with magnesia.

The loss of weight on incineration, in the fourth experiment, is not entirely due to water. Some of it must be laid to the account of the organic matter entangled in the crystals, which caused them to assume a deep brown colour when burned. Taking this abatement into consideration, the loss of water is about what would take place if the crystals had the same composition as the crystallised phosphate of lime, described by Berzelius as formed when common phosphate of soda is added drop by drop to a solution of chloride of calcium. This salt contains twenty-two per cent. of water, or four atoms, one only of which is basic, the other three being water of crystallisation. On this supposition, therefore, the stellar phosphates have the following formula: $2CaO, HO, PO^5+3HO$.

By adding a little chloride of calcium to healthy urine, and reducing its acidity to near the neutral point with caustic soda, I have often succeeded in obtaining an abundance of crystals closely resembling those occurring spontaneously in urine. The reaction of the urine, in which I have found the crystallised phosphate of lime has been generally faintly acid, often nearly neutral, and more rarely alkaline from fixed alkali.

The appearance of a crystalline deposit of phosphate of lime in urine is not common. It is, in fact, a rare deposit as compared with oxalate of lime, uric acid, or the amorphous lithates. Dr. Hassall thinks it is more common than the triple phosphate, if decomposed urines be excluded. Practically, however, the reverse is true. Triple phosphate is frequently seen in the urine of the sick, even a few hours after emission, in a multitude of cases where there are none of the ordinary signs of decomposition or putrefaction. Triple phosphate is also very commonly seen in urines made alkaline by remedies, after standing a short time.

The presence of the stellar phosphates in quantity is, so far as my experience enables me to judge, an accompaniment of some grave disorder. In addition to the case of diabetes already mentioned, I have seen the stellar phosphates in cancer of the pylorus, once in phthisis, and more than once in patients exhausted by obstinate chronic rheumatism. They may, however, under peculiar conditions, be precipitated in a healthy urine. When the urine is rich in lime, and its acidity is, at the same time, depressed to near the neutral point, stellæ of phosphate of lime may form quite independently of any grave disorder, merely as the result of a coincidence in the chemical composition and reaction of the urine. For example, after a full meal, the acidity of the urine becomes greatly reduced, and lime derived from the food is in excessive proportion. In such circumstances, I have several time detected stellæ of phosphate of lime, but only in scanty numbers. A depressed acidity of the urine is an essential contingent to the formation of these crystals; and if the urine, subsequently to their formation, increase in acidity, they may spontaneously disappear.

The persistent occurrence of this deposit in the urine may lead to the formation of stone in the bladder. Calculi of pure phosphate of lime are exceedingly rare, and have quite a different history from the common phosphatic stone of triple phosphate or fusible matter. The latter is always precipitated upon some previous formation as a secondary deposit, and is produced by decomposition of the urine. Hence, vesical calculi that have long resided in the bladder, and have been the source of violent and repeated catarrh of that organ, are covered externally with a phosphatic crust. But the pure phosphate of lime is a primary formation; and, like other primary formations, it may alternate with uric acid or oxalate of lime. There is a beautiful specimen in the museum of the Manchester Infirmary, where phosphate of lime alternates with pure uric acid. The condition of urine accompanying a pure phosphate of lime stone has not, I believe, been made the subject of direct observation; but one would expect that it would be highly significant of the nature of the concretion. I should expect the following: an urine of pale colour, either feebly acid or alkaline from fixed alkali (not from ammonia), with a deposit of stellar phosphates mixed with amorphous phosphate of lime, and absence of triple phosphate and signs of vesical catarrh.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF ARM-PRESENTATION WITH EXOMPHALOS.

By J. G. SWAYNE, M.D., Physician-Accoucheur to the Bristol General Hospital, and Lecturer on Midwifery at the Bristol Medical School.

[*Read February 28th*, 1861.]

ON October 19th, 1860, Mr. Goodeve requested me to see a patient whom he was attending in a court at the back of the Mall, Clifton, and to whom he was called by one of the midwives of the Clifton Dispensary. He stated that there was a presentation of the elbow, as well as something which appeared to be the umbilical cord and a portion of placenta. I found on my arrival that the membranes had been ruptured for some hours. There had been some trifling hæmorrhage, but it had produced no constitutional effect. I found, on examination, that the right elbow presented posteriorly, and apparently several coils of funis, quite destitute of pulsation. The pains were but slight. As the os uteri was pretty well dilated, we decided on the propriety of turning without delay. Having put the patient under the influence of chloroform I passed my hand into the vagina, but found a difficulty in proceeding with the operation in consequence of the large quantity of the supposed cord, which entangled my fingers and impeded the movements of my hand. I therefore withdrew my hand, and at the same time attempted to draw down some of these coils externally. I could not succeed in doing this effectually, but I was able to draw out enough for an ocular examination. On looking at some of the supposed cord, by the light of a candle, I found, to my surprise, that it was a coil of intestine of a deep port-wine colour, and of such a size that I could hardly suppose it to be fœtal. A horrible suspicion immediately flashed across my mind. Could it be maternal intestine which had passed through a rent in the uterus, produced by some clumsy attempts at turning on the part of a midwife? As Dr. Tyler Smith remarks in his *Manual of Obstetrics*; "In a case of this description happening to a midwife, in which a medical man might be called after the rupture of the uterus and prolapse of the intestine, some little caution would be required to avoid mishief;" and then he mentions two instances in which portions of intestine had actually been pulled down and cut off by ignorant practitioners who had mistaken them for the cord of a dead child. But I did not long entertain this suspicion. The woman's condition was very good, and there was an entire absence of any of those urgent symptoms which characterise so fatal an accident as rupture of the uterus. On closely questioning the midwife, she gave a perfectly clear and distinct history of the case, so as quite to remove all idea of improper interference on her part. On examining more carefully, I found that the intestine passed up within the uterus by the side of the child's arm, and close to a soft elastic body that felt something like placenta. Some strong pains now set in and began to force the child, which was small and flexible, into the cavity of the pelvis. We therefore determined to wait for a time and make no further attempts to turn, intending, as the child was undoubtedly dead, to deliver by evisceration, if necessary. Mr. Cross, who was in the neighbourhood and now came in at our request, concurred in this opinion. A few strong pains now came on and completely doubled the child, expelling the breech first, as in cases of spontaneous expulsion. The mystery with respect to the presentation was then cleared up. The child was still-born; it was a transverse presentation, but, together with the arm, the contents of a large abdominal tumour or exomphalos had descended into the vagina. This tumour consisted of nearly all the abdominal viscera of the child covered merely by a thin fine membrane like the peritoneum; the abdominal parietes being in a great part deficient. The greater part of the colon, much distended with meconium, had come down; the liver also could be felt at the same time, and this it was which had given rise to the idea that a portion of placenta presented. The thin investing membrane had given way, probably during some of the vaginal examinations first made, thus allowing the intestines to prolapse. The mother recovered without any unfavourable symptom.

This case is instructive, both on account of the puzzling nature of the presentation, and also as showing the ease with which spontaneous expulsion may sometimes take place. This facility, in all probability, was partly due to the diminished bulk of the child's abdomen, from the protrusion and escape of the viscera. A malformation of the abdominal parietes, producing a tumour in some respects analogous to spina bifida, is not very uncommon. Our museum at the Medical School has several specimens; and not long ago, I attended a patient who gave birth to a child, in whom nearly all the intestinal canal was contained in a transparent sac of this kind external to the abdominal cavity. The head presented, and there was no peculiarity in the labour. The child lived a week, and died with convulsions and other symptoms of constitutional irritation, much in the same way as a case of spina bifida would have done.

In the case above related, the peculiar feature is that the malformation formed part of the presentation, and thus gave rise to some difficulty in the diagnosis. In the *Obstetrical Transactions* for last year, p. 239, a case is published by Mr. Sedgwick, so similar in every respect, that I give it at length in his words. "A young married woman, healthy in her labour with her first child, sent for me on September 26th, 1859. I saw her at 2 P.M., and found her suffering from only slight pains, which came on at intervals of eight or nine minutes. Soon after entering the room, a pain, somewhat sharper than usual, came on whilst she was walking about, by which the membranes were ruptured, and a very large amount of fluid was discharged. On making an examination, I found the os dilated to the size of a sixpence, and what was thought to be the elbow presenting. As the progress of the labour was slow, I left the patient for a short time, and called to see her again at 5 P.M. The os was then dilated to the size of a shilling, and the presenting part was distinctly ascertained to be a sharp projecting elbow. I now succeeded in readily dilating the os, and in feeling the right hand of the child, which was lying towards the sacrum, the back of the child being turned towards the abdomen of the mother. On passing up my hand, with the intention of turning the child, I found a difficulty in doing so, from what appeared to be an attachment of the placenta low down, giving rise to the supposition that it was a case of partial placenta prævia. The mass was just within the posterior border of the os, and presented many of the characters of the placenta, covered with membrane. This was subsequently found to be occasioned by a congenital deficiency or imperfection of integument over the abdomen of the fœtus, whose abdominal viscera were covered only by a peritoneal or transparent membrane, which formed a large loose bag, in which the liver and intestines of the fœtus were lodged, almost outside, as it were, of its abdomen. The transparent membranous bag was probably at this time ruptured, for the part mistaken for the placenta was the fœtal liver; and the obscurity of the case was further increased by some loose folds of the small intestines being in the position which the umbilical cord might have occupied had the placenta really been in the situation assigned to it. No hæmorrhage had occurred; but, as the case was doubtful, I called in the assistance of my neighbour, Mr. Cholmondeley, who succeeded in bringing down the left foot of the fœtus, and delivery was effected without much difficulty. The placenta, which was attached high up, was expelled soon after the child, who was still-born, death having occurred in effecting the delivery. The child was a male, full grown, and presented a rare form of malformation, viz., congenital deficiency of the abdominal integuments and muscles, the only covering to the viscera of the abdomen being peritoneum and such rudimentary traces of skin as occur in spina bifida, where the investing membrane is transparent, as in this instance. The mother up to the present time has recovered favourably, and is likely to do well."

CASE OF POPLITEAL ANEURISM CURED BY FORCIBLE FLEXION.

By Augustin Prichard, Esq., Surgeon, Bristol.

[*Read February 28th*, 1861.]

John Gough, aged 34, an otherwise healthy man, employed on the South Wales Railway, was admitted under my care into the Bristol Royal Infirmary, with a pulsating tumour of the left ham, which had existed rather more than two months. The swelling was of considerable size, and caused a bulging of the muscles on the inner side of the knee; the transverse diameter was greater than the vertical, and it pulsated strongly, giving rise to so much pain and weakness of the leg, with œdema, that he was unable to work.

Having read some instances of cure by forcible flexion which had been treated at one of the midland hospitals,* and knowing the value of this plan of treatment in cases of hæmorrhage from the arteries of the hand, I resolved to try it in the present case.

I must premise that my patient was a sensible man, to whom I could explain the nature of his complaint; and he had already learnt to lessen his pain and stop the pulsation by pressing with the thumb on his femoral artery; and the position which he chose for this purpose was just below the middle of the thigh, where the vessel is about to enter the sheath formed by the adductors.

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* Upon referring to the *Lancet* of the year 1859, I find that cases were cured in this way at that time in the London hospitals.

By means of a leather anklet, to which a bandage was attached, I flexed the leg forcibly on the thigh, and in this way could control all pulsation for the time; but from the swelling of the leg, which extended up to the knee, and the pressure of the tumour in the ham, the position was so irksome that he was unable to continue it constantly, and I therefore applied first of all a common, and afterwards a horse-shoe tourniquet, which he was directed to tighten whenever the limb became very painful and he found it necessary to relax the flexion.

The pain soon subsided, and the œdema lessened; and, although the disease began to yield to the treatment within three or four days of its commencement, he was not absolutely cured until the 12th of September—that is, after *twenty-five days* had elapsed, when all pulsation ceased, and a firm circumscribed tumour alone remained. The limb was never extended during this time, and at the latter part of it he was able to bear the flexion continuously. Some little difficulty was experienced by him for a few days in his attempts to get his limb straight again, but it was all satisfactorily accomplished.

I saw him two or three months afterwards; it was just possible to distinguish the tumour in the ham, but the limb in every other respect was perfectly sound and serviceable.

There are, of course, cases where this plan cannot be carried out, but I believe that the majority would yield to it; and I know of no other serious malady of a surgical nature which may be cured by means so remarkable for safety and simplicity.

ON LIFE-ASSURANCES AND SUICIDE.

By J. G. Davey, M.D., Northwoods, Bristol.

[*Abstract of a Paper read February 28th*, 1861.]

The author's facts and reasoning were directed to prove —1. That the act of suicide is, at all times and under all circumstances, but *one* of the many indications of cerebro-mental disease (insanity); 2. "That the conduct of life-assurance offices towards their numerous clients, and in so far as suicide is concerned, is in all respects incompatible with an advanced psychology, and at variance with a due sense of right and common justice."

After commenting on the views expressed by editors of journals, and those to be found in the newspaper press, he drew attention to the doctrines propounded by such men as Quetelet, Guerry, and others. These, it was contended, should be the base of all inquiries into suicide, its causes and nature. Dr. Davey sought to prove that, in the words of the first-named writer, "the "empire of causes will carry it over free-will"; and that, as Guerry has declared, "the greater number of facts of a moral nature, considered in the mass, and not individually, are determined by regular causes, the variations of which take place within narrow limits, and which may be submitted, *like those of a material nature*, to direct and numerical observation". "If", said Dr. Davey, "we would form a correct estimate of any given case of suicide, it is desirable not to isolate the mere act of self-destruction from either the personal history of the patient or the circumstances immediately surrounding him at the time of his attempt on his life. He said that some persons unquestionably insane—ordinarily insane—have the power to conceal the indications of their deep affliction; that this same power they employ, from the desire to keep a too painful and personal affair secret, and to themselves; and that the facts stated were especially true as regards patients the subjects of suicidal insanity, who seldom wore

> "their hearts upon their sleeve,
> For daws to peck at."

Dr. Davey cited several cases from his own experience to prove the positions taken.

With respect to assurance societies, he suggested that the suicidal clause be omitted from all prospectuses. He said: "Regarding the act of suicide as one consequent on brain-disease, and altogether inseparable from it, it is demanded as a social right, and as a simple act of justice, as between man and man, that death by suicide be henceforth regarded and accepted as of the same involuntary, unavoidable, and natural character as belongs to death succeeding to an ordinary compound fracture, a fall from a height producing concussion of the brain, typhus fever, hæmorrhage from an accidental wound, pneumonia, etc.; and that, therefore, all life-assurance offices do omit all and whatever reference to, or provisions in connexion with, *suicide*." He suggested that their calculations—money calculations—be made accordingly; and, in order to demonstrate the uncertainty of the conduct of directors of assurance offices towards their clients, a case of a very painful character was detailed, and contrasted with a recent good example set by the Provident Clerks' Mutual Life Assurance Association.

Dr. Davey concluded his paper by pointing out some of the anomalies of life-assurance societies in relation to those assuring their lives, and quoted from authorities the law as it at present stands, and as it affects the heirs or representatives of the suicide.

Reviews and Notices.

The History of Medicine: comprising a Narrative of its Progress from the Earliest Ages to the Present Time, and of the Delusions Incidental to its Advance from Empiricism to the Dignity of a Science. By Edward Meryon, M.D., F.G.S., Fellow of the Royal College of Physicians, etc. Volume i, pp. 483. London: Longman and Co. 1861.

It is much to the credit of Dr. Meryon that he has undertaken to write a book on a subject so neglected, yet so important, as the History of Medicine; the more so, as he has not simply confined himself to the enumeration of names, events, and dates, but has endeavoured to treat the matter philosophically. The absence of a good English work on Medical History is a conspicuous defect in our literature; for, while valuable essays and treatises have appeared at various times, we have not had a book fit to be compared with the volumes of Leclerc or of Sprengel. Yet, high as is the value of the writings of these authors, it would not be enough in the present day that any one should merely go over the ground of details which they—especially Sprengel—have so thoroughly trodden. We see this in the turn which general historical study has taken during the last thirty years. Legendary history has been shaken to its foundation. The interesting stories of Romulus and Remus, of Numa Pompilius and the nymph Egeria, of the other five kings of Rome and all the incidents of their reigns down to the expulsion of the Tarquinian family; even the origin and the date of origin of the Eternal City itself—these must all take their places under the comprehensive appellation of *myths*, and be regarded as mere embodiments of ideas, founded or not founded in fact. Where, too, historical personages and facts have held their ground, their mere recital is not now enough. Men now want to know the bearings of the persons and events; what influence they exercised on each other, on the progress of the contemporaneous age or of succeeding ages. Thus is general history being turned to its proper account.

In medicine, also, we want a philosophical history; and it is this want which, we imagine, Dr. Meryon has essayed to compensate. To assert that he has worked out the subject in such a manner as to leave nothing to be done by any one else who may apply himself to the task, would be an act of flattery as distasteful to his conscience as it is repugnant to ours. Nor would it be fair to omit calling his attention to the fact, that a few errors in detail—which can only be regarded as *lapsus calami*—have here and there slipped in. These, however, he will readily find when he revises his work for a second edition—a stage at which, we trust, it will ere long arrive. But, without pledging ourselves to an agreement with all his opinions, we have no hesitation in expressing our conviction that Dr. Meryon has written *con amore*—with a mind fully impressed with the high importance of his subject, and desirous of doing it all the justice in his power.

The work of Dr. Meryon consists of an Introduction, twelve chapters, and an Appendix. The subjects of the chapters are: 1. Earliest Condition of the Healing Art; 2. The Greek Systems of Medicine from the Time of Hippocrates to the Christian Era; 3. The Healing Art as it existed in Ancient Rome; 4. Medical Sects among the Early Christians; 5. Saracenic School of Medicine; 6. Progress of Medicine, and its Vicissitudes, from the Seventh to the Fifteenth Century; 7. Progress of Medicine during the Fifteenth Century; 8. The Principal Anatomists of the Sixteenth Century; 9. Paracelsus and Paré; 10. Influence of the Philosophy of Ramus on Medicine—Delusions of the Sixteenth Century; 11. Secret Poisoning and Medical Jurisprudence—Monograms, and their Influence on Pathological Anatomy, of the Sixteenth Century—Surgery; 12. Medicine and Surgery in England during the Sixteenth Century—Rosicrucians.

In his introductory remarks, Dr. Meryon points out the peculiar position of the medical profession, in being the only profession in which "the practitioner has no competent judge to apportion a due reward for his scientific acquirements." Success is thus the only distinction; and the shortest road to success is often not the most honourable. "Yet even this state of things may have its advantages, for, although the rights of true merit are often disregarded, and honourable conduct is sometimes violated, the spirit of independent research is obviously stimulated, and thus it is that every lawful use of man's powers and faculties is enlisted to build up a science which, if honestly pursued, may tend to ennoble his intellect and satisfy his reason." (P. 3.)

The object which Dr. Meryon has proposed to himself to perform is thus expressed.

> "To exhibit the nature and amount of scientific as distinguished from empirical knowledge which has been gradually acquired relative to the phenomena of life, their relationship with each other, and, when that relationship is disturbed, the data which are necessary to form a really good hypothesis in the administration of remedies for its readjustment, or to determine how far these facts go, to form a solid basis for a pure and exact science."

This raises an important question:—How far have improvements in the practical application of medicine as an art (*i.e.* hygiene and therapeutics) run parallel with the development of biological science (anatomy, physiology, chemistry, and pathology)? and how far is it probable that empirical may at some time entirely give place to rational medicine? The full consideration of this question Dr. Meryon is apparently reserving for a succeeding volume; but he gives, in concluding the present volume, the following sketch of the ideas which he holds on the subject:—

> "If the phenomena of life are to constitute the solid and irresistible foundation of medical *science*, it is obvious that they must not be made subservient to every conflicting tenet; but, on the contrary, that they must be isolated from the art and studied abstractedly, so as to impress on the science which they constitute an original and independent character. Being thus established on the immutable laws of nature, and irrespective of any immediate application, biology must of necessity supply the principle by which all medical speculations must be tested, and by which all antagonistic opinions must be judged." (Pp. 468-9.)

It would not be possible within the limits of a review to discuss the question here raised by Dr. Meryon; nor would it, perhaps, be fair to him to do so. Nor can we here enter on the consideration of several interesting matters which are suggested to the mind by the perusal of a work on the History of Medicine, such as, how preeminently medicine has been beset with hypotheses within its ranks, and charlatanry from without; how, while these have doubtless retarded progress, the solidly founded science has steadily held its ground from the days of the Asclepiadæ down to our own time; how empiricism (the legitimate empiricism of Celsus we mean) and the development of hypotheses, are necessary results of the imperative demand which exists for the immediate practical application of medical knowledge—which therefore, unlike other sciences, such as astronomy or geology, cannot wait for the full development of facts. In regard to all these points and many others, however, much valuable groundwork for reflection will be found in the *History of Medicine* of Dr. Meryon—a work which, therefore, we commend to the study of the members of our profession.

A Yankee Medical Squabble. There was some disturbance a few weeks ago in the New York University Medical College, arising simply from explanations which the faculty demanded of Dr. Aylett, who was connected with the institution in a sort of semi-official way, regarding his conduct in pecuniary matters with the students and the faculty. Dr. Aylett, instead of explaining, got mad, and managed, with the aid of the sensation-reporters of the daily papers, to give the matter a political aspect. The excitement, however, soon abated. Dr. Aylett left, taking a few students with him, and things have returned to their old way. We had already forgotten the whole affair, when we received the January number of the *American Medical Gazette* (Dr. Reese's), which is so hard up for matter that it lays before its readers twenty pages of extracts from the sensation-papers of New York, giving, in the best style of the great and glorious Jenkins, "ye rise, progress, and ye melancholic end of ye foolish squabble." What does the *Gazette* mean by laying before its readers twenty pages of the offal from sensation-papers? (*Phil. Med. Reporter.*)

British Medical Journal.

SATURDAY, MARCH 30th, 1861.

HOSPITAL PHYSICIANS AND SURGEONS: THEIR TENURE OF OFFICE.

The retirement of M. Ricord, a short time ago, from the office of surgeon to the Hôpital du Midi, naturally enough called the attention of the profession to the subject of a very vexed question; viz., What are the principles which should regulate the tenure of office of the medical officers of public medical charities? At what age ought they to be called upon to relinquish the important trusts confided to their care? According to the terms upon which M. Ricord accepted, he retired from office, because he had attained his sixtieth year of age. One of the most celebrated lecturers of his day, in the vigour of mind and body, to the regret of his numerous audience, he quitted his post, in accordance with regulation. So exceptional, indeed, did his case appear, that earnest endeavours were made to bend the law to meet the emergency (as it was regarded), and would doubtless have been successful, had not M. Ricord positively refused to be a participator in the infraction of the regulation. We conclude, therefore, that M. Ricord regards the rule as a wise one. The question has again been recently brought under our consideration, in consequence of its having been lately discussed at one of our metropolitan hospitals —St. Mary's—on the occasion of the re-election, according to laws, of the medical officers of that institution. We therefore think it opportune to say a few words on the subject, as it is one of universal interest.

The conclusions at which the governors of that hospital have arrived, after long and careful consideration of the different interests affected in the matter, and after arguing the question apart from all personal considerations, are, in our opinion, founded in sense and justice, and will, we verily believe, be hereafter quoted as a precedent by other hospitals of the country. These are the conclusions :—No medical officer shall hold office in the hospital after the age of sixty; nor shall any senior medical officer hold office for a longer period than fifteen years. The whole staff shall be re-elected every five years. The present medical staff of St. Mary's Hospital are very properly exempted, and for obvious reasons, from the operation of the new law. We will now briefly consider the reasons upon which these conclusions were based, or rather which, as we conceive, justify their adoption.

The parties whose interests are to be considered in the matter are, the sick, the medical profession, the public, and the medical officers themselves. The question, therefore, is a complex one; and we must be careful, in considering it, to weigh evenly the interests of all parties, not permitting those of one party unfairly to predominate over another. Moreover, we must keep this fact fairly in view; viz., that we cannot hope to arrive at a conclusion which will fully satisfy all interested in it; and that whatever scheme is proposed to meet the difficulty will doubtless be open to some sort of objections. In such a case, the business of a wise man clearly is to make that choice which shall be open to the fewest objections.

Considering, then, the interests of those concerned in this matter, we would say, in the first place, that it is in the interest of the sick—the chiefest objects of our medical charities—that the medical officer should retire at the age of sixty. We well know that at this term of life, with the mass of mankind at least, the mental and bodily faculties are on the wane; the eye becomes dim; the hand loses its cunning, the ear its fine perceptions; every organ and part of the organism is, in fact, on the descent from the culmination of our perfected nature. The man is less energetic, less capable of mental and bodily labour. It is evident, therefore, according to the laws of nature and of common sense, that the sick will no longer receive from the medical officer—this period of his life passed—the services which had been previously rendered by him. Such is the rule; and, if exceptional cases be adduced to invalidate the rule, this objection may be applied to them: sexagenarian hospital medical officers endowed with unusual mental and physical powers are by the very fact, and in almost all cases, blessed with an extensive private practice, and *therefore* unfitted at such an age to do justice to hospital patients. We need not look far to see the proof of this admitted and practically acted upon. Sir B. Brodie, Dr. Watson, Dr. Babington, Dr. Latham, and many others, years ago resigned their hospital appointments, and have, as we venture to think, thereby done much to establish the proper rule of practice in this case.

Then, secondly, the interests of the public and of the profession demand such a fixed period of retirement. Our hospitals are, as we boast, schools of medicine; and the vast field of instruction which they offer, if rightly and fully cultivated, will undoubtedly produce a large stock of scientific knowledge which is indirectly of service to the public. But how can such a field be made to yield its due fruits, unless the labourers employed on it are numerous enough to reap and gather in all its riches? Our desire should be, for the benefit of mankind and of medical science, to rear up in hospitals the greatest possible number of highly educated men who can be there disciplined—*i. e.*, in due accordance with the circumstances of the case. But how can the benefits of this high education—the education, we mean, which can nowhere be obtained except in a hospital—be widely distributed, unless some definite term be fixed for the retirement of men in office?

Lastly, as we have said, there are the interests of the medical officers to be consulted. But this question needs no discussion, if it be met by the answer contained in the regulation thus adopted. The medical officer would take office under the agreement, and, therefore, understanding that he retired at the age of sixty.

It would be invidious to point out the many other evils which attend an indefinite occupation of office. They may be inferred from the facts already stated. To point out any good attending such prolonged occupation would, we think, tax the imagination. We must not, as we have already said, be met with the very specious argument adduced from exceptional cases, like that of M. Ricord. We must deal with the rule, and not with the exception—with the species, and not with the individual. And, taking the rule, we repeat, that he who would assert it was to the advantage of medical charities to have sexagenarian medical officers must draw upon his imagination for his arguments.

We have not considered whether a surgeon should retire earlier than a physician; for the question would only lead to invidious distinctions in a matter which, humanly speaking, needs no such consideration. In France, as we understand, the regulation which requires the surgeon to retire at sixty, prescribes sixty-five as the term of the physician's services.

Another important question affecting the tenure of office of the physicians and surgeons attached to medical charities, is this, Ought medical men to be elected for once and all, subject to forced retirement at a certain period, say sixty years of age; or ought their elections to be periodically renewed? The best consideration we can give to the subject leads us to the conclusion that periodical elections are desirable, their advantages certain, and their evils in great part imaginary.

The governors of hospitals are bound, above every other thing, to provide for the well-being of the sick; and are therefore justified in taking those measures which will best secure the due performance of their duties by the medical officers. We need hardly say that in most cases no stimulus of such a kind is required by medical men, and that their duties are fully and faithfully performed; but we all know what human nature is, and that it is necessary, therefore, to provide against the possible shortcomings of any single member of the numerous medical men who form the staff of our large hospitals. Now it is manifest, in our opinion at least, that periodical elections cannot fail to act as a useful kind of *memento mori* to all whom they concern, and may be, in certain particular instances, a very serviceable engine in the hands of the governors, and even of the medical staff. And whom can they injure? Surely no one but those who have rendered themselves justly obnoxious to their effects. It seems absurd on the face of it to suppose that a body of governors would band themselves together at a particular moment for the purpose of ridding themselves of an officer who did his duty properly—in other words, of injuring themselves; and equally absurd to suppose that any clique could successfully take advantage of such elections, and oust a fitting man in possession of office solely for the purpose of putting some favourite friend into his shoes. Why then should not governors hold this salutary power in their hands? and why should any man who does his work faithfully fear its operation? We confess that we are unable to suggest any valid objection to such a regulation; but, on the other hand, we see many reasons for its acceptance.

But if periodical elections be admitted, then comes the question, How often should they take place? To be of use, they must, in our opinion, be neither too frequent nor too distant. Annual elections appear practically useless; they degenerate into mere annual forms. Besides, the particular kind of incapacity or unfitness for office which they are meant to provide against is not that which developes itself and becomes manifest, so as to permit of its being practically dealt with, in the course of months; this incapacity or unfitness is the slow growth of years. For any striking delinquency, such as would deserve immediate dismissal, the laws of hospitals already provide.

To meet the object required, the period of elections, according to the regulations adopted by the governors of St. Mary's Hospital, is the quinquennial. This *mezzo termine* between annual and decennial elections seems to meet the difficulties of too infrequent and too frequent elections. A quinquennial election gives the governors of hospitals a reasonable and useful power over their medical officers, and in their hands, we may safely affirm, will never be a cause of offence or stumbling to any medical officer who performs rightly and conscientiously the work he has undertaken.

For our own part, we think the dignity of the profession would be equally well sustained if the appointments of their medical officers were always, at all times, at the disposal of the governors. No one, who had any respect for himself, would hold office for a moment under a body of men who he knew were wishing to be rid of him; and we may be very sure that, when a man holds office contrary to the opinion of a majority or even a large minority of governors of a hospital, he holds his appointment to the prejudice of the hospital. We of course base this view of ours upon a conviction, derived from long experience, that the governors of hospitals are men of honour and of justice, and may, *as a body*, be safely trusted to do justice on their medical officers. No man, under them, can be subject to the fanciful tricks of individual caprice. To seek from governors a promise of long tenure of office—a tenure for life—does, we must confess, under such considerations of the case, seem to us something like an undignified attempt to make a provision for holding office during some possible period of future incapacity, or contrary to the wishes of the governors.

That part of the new regulations, which would prevent a senior medical officer from holding office for a longer period than fifteen years, was adopted, in order to provide for the admission of as many medical men as possible to the benefits of hospital practice instruction. If a man, for example, has the good luck to attain to a senior appointment at an unusually early age, it was thought that he might very gladly consent to resign it at an unusually early age.

We will only add, in conclusion, that we hope the example thus set by St. Mary's Hospital will meet with the attention it deserves from the governors of hospitals in all quarters of the kingdom. We venture to see, in the proceeding, the germ of a very extensive reformation in the matter of our hospital appointments. No one, except *les satisfaits de la veille*, will deny that such a reformation is required.

DR. COPLAND ON TOBACCO-SMOKING.

The British Anti-Tobacco Society is still animate. Happy was it last week in seducing our excellent President of the Pathological Society into its presiding chair, at a public meeting convened "for the purpose of exposing the physical and social evils of smoking." Two resolutions were proposed and carried by acclamation. We won't answer for their genuineness, because of their curious and amusing cast; but we give them as excerpted from *Daily Telegraph*. Here is the first, fathered by a Mr. Reynolds:—

> "That, as the properties of tobacco are essentially at variance with the laws of our nature, injurious consequences must obviously arise from the practice of smoking."

And here the second, by a gentleman named Christian (probably, a lineal descendant of our friend in the *Pilgrim's Progress*):—

> "That, as smoking is expensive, consumes time, and generates thirst, and vital depression, and thus leads its victims to seek relief from intoxicating drinks; it is, therefore, a prolific source of social evil."

It will be a great relief to our chemists and physiologists to learn what the real effects of tobacco are upon the animal economy, they having in vain wandered so long in search of the facts of the case. No one, it appears, answered the appeal made to argue in the opposition way, in favour of tobacco; and therefore, as no discussion could be excited, all ended in a perfect state of an unsatisfactory *nem. con.* We shall follow suit on this occasion, and shall content ourselves with giving the observations of Dr. Copland as we find them reported:—

> "Perhaps," he said, "some of his hearers were surprised to find that a medical man took the chair on the present occasion, because it militated against the interests of the profession to oppose the practice of smoking, inasmuch as by its abolition it would be so far injurious to them as to make many diseases to be comparatively unknown, and thereby largely benefiting the public health. After very careful consideration of the subject and long experience he found that tobacco-smoking was productive of most distressing diseases, and ought to be discouraged by every means, and especially in the present state of society, when a man could hardly walk a few yards in any of the London streets without seeing men and even boys smoking tobacco. He was aware that persons could smoke very moderately without really feeling any injurious effects; but the practice invariably increased, and produced its deleterious results. The public would, perhaps, be surprised to learn that he had daily attendants in his consulting-room for relief from diseases arising from smoking tobacco. All medical men knew as well as he did that the habit, freely indulged in, lowered the digestive organs,—lowered the change of food into healthy blood, and completely unmanned the individual addicted to it, injuring his offspring, if he ever got any and they lived, to such a sad extent as to stunt their growth, and to cause them to be more or less debilitated. There was no vice that visited its sins upon the third and fourth generation more completely than this, which even is visited on himself, the first generation. It was seldom that great smokers had great-grandchildren or grandchildren, and no ladies, who desired healthy children, should ever marry smokers, as, besides its unmanly influence, it led to every species of dissipation and poverty. He desired them to bear in mind that its unmistakable physical injuries were the promoters of heart-disease, imperfect digestive organs, paralysis, lunacy, and a peculiar form of apoplexy. They were all aware, of course, that diseases with which they were afflicted were beyond their control; but in many instances they might be controlled or counteracted in its effects by the disuse of tobacco. On the Continent, where smoking became more general than here, medical men stated, that the mean duration of human life was shortened five or ten years. [*Hear, hear.*] The present Emperor Napoleon had shrewdly observed, that tobacco-smoking was having its injurious effects amongst some of his subjects, and had ascertained that in the Polytechnic School of France no prizes were obtained by the smokers, but that all the prizes were carried off by those students who did not smoke. Where the habit of smoking was carried on to an increasing and enormous extent in France and Germany, there the increasing numbers of stunted young men obliged the Governments to reduce the standard for the army. In all his experience he (the chairman) never knew a single instance of smoking preventing colds and infectious diseases; but he knew it was productive of many diseases, especially when carried on extensively, and what was still more sad, it injured the mind equally as much as the body—the moral degeneracy as much as the physical degeneracy. It was selfish as well as injurious; and any person in an apartment where tobacco-smoke accumulated, suffered from its pernicious effects equally with the smoker. He did not come before them that evening to hold out a dogma, but he came there to state what he was thoroughly convinced was the truth; and he was desirous, as a lover of his

country, to set forth the facts, that his countrymen may not degenerate, as they now undoubtedly were, by smoking tobacco. He concluded by dwelling upon the expense also attending the consumption of tobacco."

There is only one remark which we will permit ourselves in reference to the above utter and entire condemnation of tobacco, and it is this: that if Dr. Copland's argument be correct, and Dr. Copland be logical, he should, incontinently, turn teetotaller, which we are happy to say we know he is not, and verily believe he never will become. More than half the crime and half the misery in this country results from the drinking of alcoholic drinks; *therefore*, according to the argument above used, alcoholic drinks should be totally suppressed. Mr. Reynolds, we may add, observed that medical men were no authority on the point, because they smoked. And we do not see that he even excepted his chairman on the occasion.

THE WEEK.

The London College of Physicians on Monday last exercised, for the first time, the privilege which they now possess, of electing their President. Dr. Mayo was unanimously re-elected to the office. It was generally felt that this compliment was due to Dr. Mayo, for the labour which he has gone through during these late stormy years of office, and, above all, for the very liberal spirit with which he has met the progressive tendencies of this liberal go-a-head age. We need hardly remind our readers that the election of President has hitherto been a quiet little piece of by-play, done in a corner of the College by certain self-elected elects, who, after conferring together, present one of themselves to the Fellows as their future president. It is only due to Dr. Mayo to say, that, but for his warm concurrence, this new process of presidential election would never have passed the Legislature. It met with his entire concurrence, although sure to bring his own term of office to an early closure. The election of president is, in future, annual, and, as we have said, in the hands of the Fellows. We believe the general feeling of the Fellows is, that the annual election is not to be a mere annual nomination of the same individual to the honourable office; but that the president's chair should be held much after the fashion of the chairs of the Royal Society, the Royal Medical and Chirurgical Society, etc.—*i.e.*, for a term of one or two years only. In this way, the older and respected Fellows of the College will be enabled to exhibit their presiding powers for the benefits of the College—or, to use a commercial mode of considering the movement, there will be, from time to time, an infusion of new blood, *vis vitæ*, into that august seat of authority.

The respective differences now existing between London College of Physicians and Apothecaries' Hall are to be smoothed down or ruffled up (as the case may be) by the High Court of Chancery. There is a suit now pending at Westminster—The Attorney-General *v.* The College of Physicians—which will be heard after the Easter recess. The judgment given on case heard will decide the nature of the licensing powers of the College. Apothecaries' Hall objects decidedly to the making, by the College, of a third class of medical practitioners.

The four following Fellows of the College of Physicians, namely, Drs. Copland, Watson, Bennett, and Jeaffreson, were on Monday last elected members of the Council of the College, in place of Drs. Burrows, Barlow, Page, and West, who go out by rotation.

The medical profession (as in so many other directions hygienic) has done great service to the public health by the fight which it has made, and still makes, against the sale of adulterated and spoilt articles of food, rotten meat, etc. We fear, however, that if great care be not exercised, one of the weapons used by its members in denouncing the aforesaid abominations, may eventually be actually turned to good service by the furtherers of adulterations—we mean the analysing faculty. The trade, it would appear, has, at last, actually begun to shelter itself under the wings of the analyst. Instead of trying conclusions with the scrutinising powers of the microscopist and chemist, Messrs. Mollasses and Sago, with the wisdom of serpents, have invited him to take an inventory of their goods—in fact, have established him as their servant, to issue certificates of the purity and excellence of the wares they sell. This practice is becoming so common, that we may, at last, expect to find a clean bill of *genuineness* delivered with every ounce of pepper and pound of butter which we purchase—the certificate bearing the signature of some powerful or celebrated analyser. We cannot, as we have said, help asking ourselves, whether this practice will not, at last, end in the defeat of the special object it has, or pretends to have, in view. If certificates of the excellence of their cocoa are delivered to the aforesaid firm on Wednesday, what is to prevent their retailing richly impure cocoa on a Saturday? It must be remembered, and we call the especial attention of Certificators Medical to the fact, that the clean bill which they give to their virtuous clients on the Wednesday fits equally well, as a certificate, to the impure goods which they may, if inclined that way, retail on a Saturday. Every day in the week, we see flourished in our faces, as proofs of the excellence of the food, etc., advertised, certificates of this kind, some of them written by men who have long since passed away from this world; in fact, almost before the memory of man. Are not we justified in asking the value of a certificate of such a character, which certifies to the genuineness, not of *the* article which is here offered to our notice, but of *one* which was specially presented to the analysing powers of the famed man of art ten or twenty years ago, and presented with a proper fee for his labours!

We have, on more than one occasion, remarked upon the present inadequate power which the Royal Medical and Chirurgical Society exercises over the opinions of the profession and the public. We are glad to find that, at last, an attempt is going to be made to give to this society the force of an authoritative and united voice. At its annual meeting last year, Mr. Charles Hawkins stated that the reason why the profession was unable to speak on matters of science to the public with authority was, that there existed in the society no proper machinery for collecting, examining, and reporting upon the numerous highly important medical subjects which are continually coming under its notice. He considered, rightly enough, that the vagaries in which the public are constantly indulging, in matters medical, are to be charged rather to this defective constitution of our Academy of Medicine, than to the ignorance of the aforesaid uninstructed public. The society has been now for thirteen months digesting his remarks; and, feeling their justice, the council of the society some time since formed a committee of the officers of its own, and of the Pathological, the Epidemiological, and Obstetrical Societies, Mr. Charles Hawkins being added thereto. That committee eventually came to the resolution: That it would be for the benefit of science that these societies should be united under one head. And the Royal Medical and Chirurgical, being the senior, and possessing a charter and the confidence of a considerable portion of the *élite* of the profession, was requested to undertake the carrying out of the proposed union. The council of this society met with legal difficulties which require removal. Hence, on April 5th, the society will have to discuss a scheme decided upon by the joint committee before alluded to, and to take steps for the removal of the legal obstructions. A supplemental charter will be recommended to enable them to carry out the opinion expressed in the resolution. The decision arrived at in Berners Street will, we think, very seriously influence, for good or for ill, the future position of the profession in this country. We cannot look upon this as a matter simply affecting the amalgamation of four societies, or the interests of the Fellows and Members of those societies. The whole profession is concerned in it. We sincerely trust that no personal or special society feelings will be allowed to influence the deliberations of the Fellows at the meeting. If it should happen that upon this occasion the profession cannot agree upon an united mode of action, such as will bring about the construction of the proposed united society, we must say that a great opportunity will be lost. Nor can the profession, in future, justly blame the government or deride the public for acting on their own authority in matters hygienic, when we ourselves decline to organise an authoritative medium such as will fairly represent the opinions of the profession and secure the confidence of the public on all matters of the nature referred to. At any rate, Mr. Charles Hawkins may have the satisfaction of reflecting that he has been the means of inducing the profession to take this question into their consideration.

Infanticide, we regret to say, is greatly on the increase in the metropolis. In this respect we are attaining the condition of civilisation of the barbarous Celestials, where infanticide is a matter of course. The parishes of Marylebone and Paddington are especially infamous, as seats of such massacres of the innocents. At an inquest on a case of the kind held last week, the deputy-coroner suggested: "The most effectual means of checking the present fearfully increasing crime of infanticide in London was by the establishment of a suitable Foundling Hospital." One could hardly have imagined that a learned functionary like a coroner could, even at his wits' ends for a remedy, at this time of the earth's day, recommend so clumsy a piece of mediæval machinery as a foundling hospital as a means of assuaging this shameful crime!

On the 13th instant, about sixty gentlemen dined at the Albion, to celebrate the establishment of the degree of licentiate in dental surgery. The meeting, we are happy to say, was a great success. Mr. Rogers, the chairman, pointed out clearly the object of the degree, that it was to secure for the dental surgeon a mark of recognition, which would be accepted by the profession at large and by the public. We can assure the licentiates in dental surgery that they have our warmest sympathy; and that our profession cannot but rejoice to see this grand movement going on, which must eventually be the means of wholly rescuing dental victims from the illegitimate hands into which they too often at present, unfortunately, fall. The greatest credit is due to Mr. Rogers, and to those who have so warmly aided him in this effort of placing dental surgery on a satisfactory footing. It is clearly necessary that a division should be made between the authorised and unauthorised *opifer* in dentistry.

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

Considerable interest has been felt here of late in the decision which might be given by the Privy Council on the report of the University Commissioners. That report contained as its most important feature, a recommendation that the University should confer a license to practise surgery as well as medicine; that at the age of 21, after a complete curriculum of study, and competent examination, candidates should be eligible for obtaining the University licenses, with the titles Bachelor of Medicine and Master of Surgery, and that those who had thus qualified themselves for practice might at the age of 25, after showing themselves possessed of a competent knowledge of Greek and proving that they had been engaged in the practice of the profession since they had received their licences, might obtain the further title Doctor of Medicine. The professional curriculum and examinations for the double license should exactly correspond with those at present required for the degree of Doctor of Medicine, while the degree should be conferred only upon those who had some experience of practice, and whose scholarly attainments were of a higher order. The Greek examination might be undergone either at the beginning of the studies, or at the time of graduation. Such an arrangement seems in every way desirable, as raising the standard of the degree, and, at the same time defending the University from the losses which would have resulted had that end only been aimed at, and no minor licenses admitted. The Privy Council has now ratified the report of the commissioners. As there are conflicting interests, so have there been great differences of opinion upon the propriety of the decision, but it is to be hoped that the matter is now definitely settled, and that the different parties knowing their position may satisfy themselves without making further efforts to effect changes in their own favour.

Since I last wrote there have been two meetings of the Medico-Chirurgical Society, at the first of which, the President, Mr. Benjamin Bell, read an account of an interesting case of fatal perforation of the stomach in a young lad who had for some time suffered from chronic gastric symptoms. The case has since been published in the *Edinburgh Medical Journal* for this month, and to it I may refer any of your readers who may be specially interested in the subject. At the meeting of the Society held a few nights ago a number of instructive cases were brought forward. Mr. Syme exhibited a patient upon whom he had effected apparently a radical cure of hernia by a very simple operation which he explained to the society. It was merely a modification of the old plan of pushing by means of an instrument a fold of skin up the inguinal canal to near the internal ring, fixing it in that situation by setting up an adhesive inflammation, and so occluding the canal. For this purpose a complicated and expensive apparatus has generally been used, and so the operation has been less frequently performed than might have been expected. These disadvantages are obviated by Mr. Syme's new method. All the instruments required are a piece of thick bougie or of œsophagus tube, with a hole drilled in one end, a needle and a stout thread. The thread, with needle attached, is passed through the end of the bougie which is pushed up the inguinal canal, the needle is then passed through the skin as in the old operation, and a little cantharadine ointment is rubbed in so as to increase the inflammation. To prevent the thread pressing too locally, and so producing undue irritation, a piece of elastic catheter may be laid between it and the skin. The patient who was exhibited to the society had been operated upon two months ago, and had not had any tendency to rupture since. With regard, however, to all the operations for the radical cure of hernia, the most uncertain, and, at the same time, a very important question is, as to the permanence of the benefit which may be derived.

Dr. Laycock exhibited a case of favus affecting not only the scalp but the body and limbs, an affection happily of very rare occurrence. The disease had existed for many years on the head, but of late, when the patient was suffering great privations, it had spread to his trunk and limbs. On the body, it presented an appearance closely resembling lichens growing from a centre outwards, in larger or smaller patches. It was curious to observe that the disease, though occurring on other smooth parts, had not spread down the forehead, probably the forehead's immunity depended upon the frequent ablution to which it was subjected compared with the other parts of the body. Dr. Laycock also showed the brain of a patient who had died recently in the clinical ward of the infirmary. He had been admitted on account of cardiac and pulmonary disease, and went on for some time without manifesting any head symptoms. One day he became suddenly hemiplegic, and continued so till his death, which happened not many hours after. During the whole time of his residence in the infirmary he never was delirious, nor did he shew any symptoms of brain disease till the hemiplegia came on. Yet, on *post mortem* examination, the whole upper surface of both hemispheres was covered with a layer of pus, indicating that inflammation had for some time been going on.

Dr. Warburton Begbie read an account of a case of croup in the adult, and exhibited a preparation of the larynx and trachea, lined with false membrane. The patient had been under treatment in the Royal Infirmary for diabetus mellitus, but had been so far well as to be able to go about. On one of the cold days towards the end of last December he went out as usual, and on his return complained somewhat of sore throat, but manifested no particular uneasiness. Nothing was visible except congestion of the pharynx. Soon, however, the peculiar breathing and cough of croup became distinct, and the strength of the patient began to decline. He expectorated twice a considerable piece of false membrane, but without obtaining, thereby, much relief from his symptoms. Shortly afterwards he died, notwithstanding the most careful treatment. The false membraue was found to extend from the larynx to beyond the bifurcation of the trachea, and occurred in patches here and there even in the smaller bronchi. No doubt this individual's chance of recovery was greatly diminished by the weakness which the diabetes had induced. The case was certainly not one in which tracheotomy could be performed with any hope of success. The malady would seem, in this instance, to have begun in the pharynx; just as Trousseau remarks, in his recently published work, it usually, if not invariably, does in France.

Among other cases of tracheotomy, narrated by various speakers, Mr. Syme mentioned one which was performed with complete success, by his late house surgeon, Dr. Bell, in a child seven months and a half old, certainly a very early age for such an operation.

The last paper for the evening was one by Dr. Matthews Duncan, on a case of cephalhæmatoma. The tumour was very large and situated on the back part of the head, its cavity communicating with the encephalon. The cerebellum was entirely wanting, or, rather, was represented by the tumour on the back of the head; and the child, though it continued to live for upwards of forty days, never was able to suck.

In the Royal Society there has been of late nothing specially medical of interest, unless it be some views upon points of transcendental anatomy detailed by Professor Macdonald, of St. Andrews, at the last meeting, but it does not seem that he added anything of importance to what is already known on the subject.

Perhaps, for the sake of your readers, I ought to say a few words about a letter which appeared some time ago in one of your contemporaries, declaring the Edinburgh medical school to be most harmonious, and going on to prove this by a reference to the good feeling which prevails among our practitioners. Of this good feeling there can be no doubt, and it were exceedingly to be regretted if anything arose to mar it, but the mistake of your contemporary's correspondent arises from his confounding the body of practitioners with the medical school. He says, indeed, that among the professors themselves there is a good deal of disagreement, but he thinks this of no importance in the schools, in which opinion most people must differ from him. It were invidious to quote special instances in proof of my original statement, although, unfortunately, too many might readily be found.

Spectrum Analysis of London Waters. Thames water taken at low and high tides, Westminster Bridge, samples from the Chelsea and Lambeth Water Companies, from the New River, from the wells above the London clay, from the sand above the chalk, and from the chalk, have been submitted by A. and F. Dupré to spectrum analysis, by the beautiful method of Bunsen and Kirchoff, and in all cases *lithium* and *strontium* were detected.

Phosphorus in the Air. M. Burral has communicated to the Academy of Sciences, at Paris, that rain-water contains a notable quantity of phosphoric acid, probably in the form of phosphate of lime carried by the wind as dust, or a phosphorated hydrogen from the putrefaction of animal matters. He computes that 440 gallons of rain-water contain from 13 to 15 grains of phosphorus; and that the atmosphere delivers annually to the soil 2,400 grains per acre.

Progress of Medical Science.

Influence of Posture on the Character of Endocardial Murmurs. Mr. Sydney Ringer finds, after examining carefully a large number of mitral regurgitant, aortic obstructive, and aortic regurgitant murmurs, that, almost universally, these murmurs are louder, harsher, and lower pitched in the lying than in the sitting or standing postures. This alteration he believes to be due to an alteration in the force of the blood. It is well known that the frequency of the pulse varies according to position; and this variation in the frequency, Mr. Ringer observes, is in an inverse ratio to that in the force of the heart's action. Several experimental observations are brought forward in support of the writer's views: among which it is stated that in certain conditions in various persons, where the pulse was unaffected by change of posture, there was no variation produced in the character of the murmurs. The alteration in the intensity of cardiac murmurs produced by change of posture appears to be more marked in the mitral than in the aortic. (*Edinburgh Medical Journal*, February 1861.)

Separation and Transplantation of the Ovary. Dr. William Turner has described some remarkable appearances found by him in the body of a woman aged 79. The pelvis contained, at the posterior part of its upper orifice, a tumour, which was attached to the peritoneum over the bodies of the last lumbar and first sacral vertebræ, and to the omentum. The uterus was displaced towards the left side, and adherent to the pelvic wall. The left Fallopian tube, after a course of a little more than an inch, terminated in a free pointed end, and contained in its interior a hard cretaceous style. From the left extremity of the tumour extended a rounded process, evidently the other portion of the Fallopian tube—the canal of which was also occupied by a cretaceous body. On further examination, the tumour was found to present the characters of an enlarged and encysted ovary. The cyst was single; its cavity was filled with a brown pultaceous fatty like mass; and a number of calcareous plates were adherent to the inner wall of the cyst, while some hung loosely from it. The broad ligament of the left side was atrophied. Dr. Turner supposes that, in consequence of inflammation, the uterus contracted adhesions to the pelvis; that the ovary then underwent enlargement, and rose out of the pelvis; but that, as the broad ligament and Fallopian tube could not rise very far, owing to the adhesion of the uterus, they had atrophied and separated; and that the ovary in the meantime had formed fresh vascular connections with adjacent parts. On the right side the ovary, Fallopian tube, and broad ligament, were normal; but on the other side, and in the recto-vaginal pouch, were three calcareo-fibroid tumours of the respective sizes of a walnut, a hazelnut, and a pea; one of which lay loose, while of the others, one was attached to the anterior wall of the uterus, to the bladder, and to the pelvic wall and broad ligament, and the other was imbedded in the floor of the recto-vaginal fossa.

Dr. Turner adduces several cases of a more or less similar nature from an essay published in 1860 by Rokitansky. *On Separation of the Fallopian Tubes and Ovaries, and on Strangulation of the last from being Twisted on their Axes.* He believes that the consideration of the cases observed tends to the following conclusions:—

1. Spontaneous separation of the ovary from all its connections (including vessels and bowels) may take place.
2. Through inflammation of the outer coat of the ovary, attachment to adjacent parts by false membranes may

occur; and vascular connection may be thus established.

3. The displacement of the ovary may occur during intrauterine life as well as in the adult state.

4. Separation of the ovary is not incompatible with increase in size, so as to form a tumour.

5. Complete separation of one ovary with part of the Fallopian tube, provided the other ovary and tube remain healthy, is not incompatible with conception.

6. The destruction of the connection between the ovary and its proper nerves would probably cause the disappearance of the symptoms of its inflammation and enlargement, due to their irritation. (*Edinburgh Medical Journal*, February 1861.)

DIPHTHERIA. The following are the conclusions arrived at by Dr. Slade in his Fiske prize essay:—1. Diphtheria is a specific disease. This fact is shown by its origin, its progress, its manner of termination, and its sequelæ. 2. Its diagnostic sign is the formation of an aplastic membranous exudation upon any portion of the cutaneous or mucous surface which is exposed to the contact of the atmosphere. 3. It is propagated by infection and contagion, and is both epidemic and sporadic in its invasion. 4. Its characters plainly indicate that it belongs to the category of *blood-diseases*. 5. It is not allied either to cynanche trachealis or to scarlatina. 6. The treatment is to be directed to the control of the exudation, and to the support of the constitution by means of tonics, stimulants, and a nutritious diet.

TREATMENT OF DELIRIUM TREMENS. Dr. Dawson, of Newcastle, treats delirium tremens with turpentine and castor oil—an half-ounce dose of each. He says:—Since 1852 I have seen many cases of delirium tremens. I have treated them all as above, and with invariable success. Only in one instance I have met with hæmaturia; and in that case I believe the dose of turpentine was much too small, and therefore did not act at once upon the bowels, notwithstanding that the nervous system was tranquillised. In a few days the congestion of the kidneys was removed, and the patient convalescent. (*London Medical Review.*)

ARSENICAL PIGMENTS. At a recent meeting of the Royal Dublin Society, Professor Davy read a paper "On the Injurious Effects of Arsenical Pigments." In consequence of the difference of opinion on the subject, and as it had never been touched on in Ireland, except by Dr. Apjohn, who had published a letter on it in the *Farmer's Gazette*, he had thought it interesting to state the results of several experiments which he had made with a view to the detection of arsenic in paper hangings, materials for ladies' dress etc. He quoted the cases of two children who lately died in London from arsenical poisoning, supposed to be contracted by sucking toys which had been covered with green paint. In one case the paper on the walls was found to contain fifty-two grains of arsenite of copper to the square foot. Professor Davy remarked on the evolution of arsenic from superphosphate of lime which had been laid by, and attributed it to the existence of the metal in the sulphuric acid employed in its manufacture. He alluded also to cases which occurred in the Adelaide Hospital, and also to the Librarian of the Cork College, in whom inflammation of the eyes and ulceration about the nose and mouth appeared to be the most prominent symptoms. He showed that it was quite possible that the arsenic might be in a state of gaseous combination which would not be detected by the ordinary tests, but which might exert a very deleterious influence on the health, and that in this respect it was analogous to phosphorus and lead. Professor Davy had detected the poison in many forms of confectionery, and in dyes for ladies' dresses, especially in green tarletan, from a piece of which, nine inches square, he had extracted twenty grains of arsenite of copper, which was so loosely attached to it that it became diffused even on shaking. He had also analysed pieces of wax taper, in ninety grains of which he had detected half a grain of arsenic by Reinsch's method—a process which does not give more than one-half the real quantity of the poison. Professor Davy concluded by detailing the symptoms under which paper-hangers, painters, and other persons who were liable to the contact of the poison laboured, and which appeared after even one day's or a few hours' work with the deleterious material, and hoped that ladies and persons who had a *penchant* for green colours would at least consider the results which must accrue to the workmen in these materials if their manufacture be encouraged.

GLYCERINE COLLYRIA. Dr. Foucher (*Bulletin Géner. de Thérapeutique*) employs, in the formation of collyria, glycerine in place of water. He uses 30 parts of glycerine with either from 2 to 4 parts of borax; 1 to 3 of sulphate of zinc; 1 to 4 of sulphate of copper; 4 to 8 of tincture of iodine (Paris Codex, we suppose); 1 to 4 of perchloride of iron; 1 to 4 of tannin; 2 to 4 of calomel; or 2 to 4 of laudanum.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, MARCH 4TH, 1861.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

REMARKS ON THE EPIDEMIC OF YELLOW FEVER BY WHICH PORT ROYAL, JAMAICA, WAS LATELY VISITED.

BY DR. KINNEAR, DEPUTY INSPECTOR-GENERAL OF THE R. N. HOSPITAL, PORT ROYAL.

[*Read by* DR. M'WILLIAM.]

DR. KINNEAR, after giving an account of the events connected with the *Icarus* before she arrived with yellow fever at Port Royal, from Belize; and of the subsequent infection with the same disease of the *Imaum* and the *Hydra* (all of which were brought forth in full detail in Dr. Bryson's paper read at the previous meeting) stated that on the 26th of October last, when many cases had been received from the infected ships, a patient who had previously been admitted into the hospital for ulcer of the leg, was taken with yellow fever, and died with black vomit on the 30th, adding another to the many proofs of the infectious character of yellow fever, which this epidemy furnished.

Dr. Kinnear, after stating in detail the number of daily admissions from the infected ships, and the results up to a certain period, observed that he had hitherto had little faith in the infectious nature of yellow fever; but in the recent epidemic, it was undoubtedly infectious in the highest degree. People who merely went on board the *Icarus*, without going below, were struck down within a period varying from thirty-six hours to four days after their visit to this ill-fated vessel. On their arrival at the hospital many were stamped with the brand of death. The countenance was of a copper colour; the eyes were muddy and bleared; the tongue red at the edges and tip. The heat of the skin was so intense, that it gave a sensation of burning to the fingers, which did not leave them for some time. After febrile action had continued for from twenty-four to forty-eight hours, it would subside, and extreme lassitude would follow. Collapse set in; the urine became albuminous, and hæmorrhage from the mouth, the nose, or the bowels, terminated life. Black vomit hurried on the fatal termination, and sometimes head symptoms with fierce delirium preceded death.

In addition to many positive proofs of the infectious nature of the epidemy, he adduced as a strong negative evidence in the same direction, the fact of the *Kingston* with upwards of forty of the *Imaum's* crew having come in from sea, while the fever was raging in the ships, and in the hospital; and that although she remained a night or two in Port Royal, but had no intercourse with them or the hospital, and was sent to the head of the harbour, five miles distant, she continued during the epidemy throughout perfectly healthy.

The *Gladiator*, also, came into Port Royal while the fever was raging; but had no communication, and departed; and, so far as Dr. Kinnear's knowledge enabled him to speak, she escaped.

The principal medical men of Kingston visited the sick in the hospital, and all concurred in the infectious and intractable nature of the fever.

Dr. M'William remarked that, as this epidemy had been fully discussed when Dr. Bryson's paper was read, it was unnecessary to go over the same ground again. He could not, however, but sympathise, and he felt the Society would do the same, with the medical officers who have been engaged in combating this terrible epidemy. He had reason to believe that Mr. J. D. M'Donald, surgeon, and Dr. Maclagan and Mr. M'Combie, assistant-surgeons of the *Icarus* (the last two of whom unfortunately fell victims to the disease); Mr. Seccombe, surgeon of the *Imaum;* Mr. James Lilburne, surgeon, and Mr. J. C. Grigg, assistant-surgeon, of the *Hydra*; Mr. M'Donogh, surgeon, and Messrs. S. Bamfield and Bishop, assistant-surgeons of the *Barracouta;* and Dr. John Kinnear, deputy inspector-general, Mr. Heath, surgeon, and Messrs. Redings and Barry, assistant-surgeons of Port Royal Hospital,—had performed their arduous and responsible duties in a manner that entitled them to the gratitude of the country; and he trusted that the fact would not be unnoticed in the proper quarter.

FURTHER OBSERVATIONS ON SCARLET FEVER.

BY B. W. RICHARDSON, M.D.

Dr. Richardson commenced by stating that precisely eight years ago, viz., on March 7th, 1853, he had communicated a paper on scarlet fever to the Society, in which he had endeavoured to establish the following propositions.

1. Scarlet fever, in whatever form or type appearing in individual cases, is a single disease in its universal character, and should have only one name.
2. After the first ten years of life, the liability of an individual to an attack of scarlet fever lessens in proportion to his increase of years.
3. Scarlet fever pays no respect to either sex, but attacks more or fewer of males or of females in a district or country, according to the relative differences in the number of the sexes in those districts or countries.
4. The seasons influence the spread of scarlet fever; the disease being most prevalent in the three last months of the year; least so in the months of April, May, and June.
5. Scarlet fever may occur twice in the same person; that such recurrences are very rare, and never, as far as can yet be ascertained, fatal.
6. The mortality of scarlet fever is greatest in children under ten years of age; is equal in the sexes; is highest in the three last months of the year; is, as a general rule, twice as great in towns as in rural districts; and is second in extent to typhus fever alone, of all the ordinary epidemic diseases.

Since the date in question, the author had, from time to time, recast those propositions; only, however, to confirm their general correctness. They had also been confirmed by other independent observers; but there were still many points left untouched, and to which the present paper would be devoted.

The points now brought forward for discussion were:

1. The reasons why season influences the spread of scarlet fever.
2. The cause of the difference in the types of the disease.
3. The connection of scarlet fever with acute rheumatic fever.
4. The chemical pathology of scarlet fever.
5. The poison of scarlet fever, in relation to its propagation and mode of action.

In considering the first of these points, the author noticed the effects of temperature, barometrical pressure, amount of rain, rate of atmospheric movement, and the electrical condition of the air. Having gone minutely into these states, he deduced, that the inquiry shewed but few facts of value bearing on the effects of special atmospheric changes on scarlet fever. It was worthy of remark, that during a period of eighty-four days, when, in one locality, there was a weekly mortality of sixteen, there were fifty-seven days of positive electricity; while in five days, during which the mortality was at the rate of forty-one per week, there were thirty-two days in which there was no electrical manifestation. It might be inferred, hereupon, that the absence of electrical manifestation was at least coincident with a high mortality; and, on the contrary, that the presence of positive electricity was coincident with a low mortality. But when we see again a week of extreme mortality (188) with two days of positive electricity, and a week of extreme low mortality (8), during which electricity was absent on five days, we can but accept the facts which seem to have an affirmative meaning in the light of coincidences, not as cause and effect. Yet it may be, that in the future some relationship between the presence of electricity and a low mortality from this disease will be traced; for it is possible that, while electricity in no way interferes with the spread of the contagion of scarlet fever, it produces modification in the effects of the poison on the animal organism.

But, if there be only this one finger pointing affirmatively towards the relationship of meteorological conditions and scarlet fever, there is a large amount of negative evidence supplied in the statistics given. We see, for example, that, with equal mortality, the most opposite conditions of temperature may be presented; but the most interesting observation is that in reference to the movement of the air. Assuming that the disorder were propagated by means of a volatile poison, it is obvious that such poison is limited in its range of action, or, at all events, that it is not influenced by the mechanical vibrations of the atmospheric sea. In a dead calm the mortality may, in one week, be sixteen; and, in another week, with a current of air passing over the infected spot at the rate of 207 miles per day, the mortality shall be the same; while, again, with a week of extraordinary high mortality, 188, a current of air may be sweeping over the home of the disease at the rate of 1010 miles.

On the cause of the difference of type in scarlet fever, Dr. Richardson endeavoured, by excluding various possible causes, to arrive at the actual cause. His results in this direction were summed up as follows:—

If then we admit (and we are bound to admit) that the variety of type of scarlet fever is not dependent on differences of poison, nor on meteorological condition, locality, physical condition of the patient at the time of infection, age, nor hereditary taint, where shall we look for an explanation of the singular phenomenon, that of two children attacked at the same time: the one may be comparatively well at the period when the other lies dead, each event encircled in the period of a few days? The question is one of the most profound and important in the field of medical inquiry. At this stage of our knowledge, we must leave it with but one supposition: that there is, in the organism itself, a directing cause, which modifies the violence of the poison, or intensifies its action.

In the section on the connection between scarlet and rheumatic fevers, the author not only gave facts from his own observation, but quoted from others who had seen the same. Analogy was also instituted as to the relation of this complicate affection and the epidemic called Dengue in Southern America.

In treating on the chemical pathology of scarlet fever, Dr. Richardson classed the disease as belonging essentially to the inflammatory group of diseases. In this respect, he differed from Franz Simon, who had stated that the disorder belonged to the same class as typhus and typhoid fever; the blood presenting evidence of relative deficiency of fibrine, on comparison of the fibrine with the blood-corpuscles—*hypinosis*. This view of Simon, resting as it did on four analyses by Andral and Gavarret, was not only incomplete, but incorrect.

Under the last head, the nature and propagation of the poison of scarlet fever, the author dwelt first on the physical character of the poison; urging that the poison was not a gas nor volatile, but a substantive solid thing. He next urged that the poison was thrown off by the lungs or skin, probably with epithelium; and that the poison introduced into the body of the healthy subject, by interfering with the natural zymotic process going on in the body, leads to formation of a lower product of the fermentative process than carbonic acid, and that the new product, an oxyacid, carried over by the systemic blood, is the cause of all the acute symptoms. This secondary poison would necessarily be detected in the excretions of patients.

Dr. Babington observed, with reference to the protective power of one attack of scarlet fever against a second attack, that second attacks had not unfrequently occurred in his practice; but that the cases of second attack were considerably modified in severity. The protection bestowed by an attack of scarlet fever against a recurrence of the disorder was far less than in the case of any other of the exanthemata—measles or small-pox, for instance. He considered it desirable that, in the investigation of this disease, meteorological inquiry should be pursued further. The direction, as well as the force of the wind, should be ascertained; and, also, the amount of ozone in the atmosphere. Dr. Babington had found as a general rule, that when the disease prevailed in a family, the type of the disease was the same in that family; and the same rule appeared to him to hold good in large institutions invaded by the malady. Few diseases were so little amenable to treatment as scarlet fever in a severe form.

Dr. Greenhow's experience had taught him to believe that the type of scarlet fever varies much in different epidemics. In one epidemic he had seen 100 cases, and 1 in 3 died. Again, in the same town and the same population, during another epidemic, 2 only in 120 cases had proved fatal. He had observed, also, that scarlet fever attacks certain families severely, and others mildly. In some epidemics, the mortality is greatest among males; in others, among females. With regard to the alleged greater prevalence of the disease in large towns, Dr. Greenhow had found it as rife in country districts as in towns. He considered, moreover, that the disorder rose and spread independently of what was called sanitary condition; and that, not unfrequently, local authorities had been undeservedly inculpated on account of scarlet fever breaking out in towns. Rigorous scrutiny had, in no small number of such cases, detected the true cause, which was the introduction of the scarlet fever into localities which had been for many years free from the disorder; and when, consequently, the greater proportion of the population was unprotected by previous attacks.

Dr. Camps thought that the question of malignity of type in scarlet fever, was that of degree of the same type, not of difference of type. He differed from Simon as to his views of the nature of scarlet fever; but with respect to its essential character, he was of opinion that further inquiry was necessary. He was not reconciled to the opinion of Dr. Richardson that the poison of scarlet fever was a solid substantial matter.

Dr. McWilliam said it was gratifying to find a man like Dr. Richardson taking a grasp of the nature of scarlet fever after investigating the subject in a philosophical spirit. Dr. Richardson had shown, in the cases he had cited, that transmission from person to person was really the mode in which the disease was propagated, and with which locality and sanitary condition had little, if anything at all, to do. Meteorology had, as yet, done little to solve the problem, as to what conditions were most favourable to the maintenance of the disease, or to its modifications of severity and type. One important meteorological element had not been recorded among the others, which had been so carefully observed and noted in Dr. Richardson's paper, and that was the temperature of the dew-point. The hygrometric condition of the atmosphere, he believed to influence disease in a degree second only to that of its temperature.

Correspondence.

MAN AND THE MONKEYS.

Letter from Henry Maudsley, M.D.

Sir,—I am desirous, if you will allow me, of adverting shortly to the notice, in your last number, of the *Natural History Review*, or rather to the remarks which are therein made upon Mr. Huxley's paper; as they appear to fail in representing the actual purport of it. Neither the question of the origin of the species, nor Mr. Darwin's theory of natural selection, are concerned in the facts to be established by Mr. Huxley, and are never once mentioned by him in his able article. The dispute between him and Professor Owen is as to certain simple anatomical matters in the monkey's brain; and whatever may be the conclusion with regard to them, there can be no doubt that the origin of our species will still remain as vexed a question as it ever has been.

When your reviewer, speaking of man and the gorilla, remarks "that the difference between the structure of their brains is only one of fifty points of difference," and concludes therefrom that Huxley's right on that question will not make Owen's wrong on the important general question, he travels beyond the record, and furthermore seems to forget that the latter raises man to a subclass "Archencephala," entirely on the strength of his "cerebral characters." Moreover, there is scarcely justice to Professor Huxley in the observation, seeing that he expressly states his intention of proving, if possible, "beyond doubt, that whether we consider the *skeleton, the muscles, the brain, or the other viscera*, man is far less distant from *Troglodytes* or *Pithecus* than these apes are from the *Lemur*, and still more from the *Galeopithecus* or the *Cheiromys*."

Professor Owen stated, at the meeting of the British Association, and has stated in print, that the third lobe of the brain "is peculiar to the genus homo, and equally peculiar is the posterior horn of the lateral ventricle and the hippocampus minor, which characterise the hind lobe of each hemisphere." This statement Professor Huxley absolutely denies, and founds his denial professedly on the evidence of every original observer who has written on the subject, on his own observations, and on the observations of Dr. Allan Thomson, made with express reference to the determination of the points in dispute. Nay, what is most strange, he is actually able to quote Professor Owen against himself. In the *Hunterian Catalogue*, it is said of a baboon's brain (No. 1338) that the "hemispheres are developed backwards, so as to cover the cerebellum. The posterior lobes exhibit infractuosities characteristic of the brain in higher simiæ, as the baboon and orang." Similarly, also, does the author of the *Catalogue* speak of the brain of the chimpanzee (No. 1338a). Besides which reference, however, Professor Huxley gives references to, and quotations from, Tiedemann, Cuvier, Meckel, Schroeder Van der Kolk, Vrolik, Gratiolet, and others, which certainly seem to establish the probability of his being in the right. The observations of Dr. Allan Thomson, specially made, are indisputably in his favour.

But even supposing the facts not to be as Professor Huxley believes he has proved them to be, it is nevertheless certain that the posterior cornea and the hippocampus minor are very variable in the human brain; they appear to be totally absent in something like six per cent. of human brains, and cannot, therefore, but be regarded in sober reason as affording the rottenest of foundations on which to build an "Archencephalic" subclass of the order mammalia.

Mr. Huxley specially adds that "there is no lack of real differences between the brain of man and those of the highest Quadrumana, though they are not those which have been asserted to exist"; but, at the same time, those differences—namely, the more pointed shape of the cerebral hemispheres, the greater symmetry of the convolutions, the smaller size of the brain as compared with the nerves in the monkey—are of the same nature as those which exist between the brain of the Bosjesman, and the normal brains of the Caucasian race.

Since, then, the paper of Mr. Huxley is entirely devoted to the establishment of certain anatomical facts, it seems rather to be regretted that your reviewer, neglecting the real issue, should have introduced irrelevant observations on a crude theory, or, still worse, opinions on the weight of Biblical testimony. The sceptic will triumphantly point to all history to shew that the number of people who believe in any doctrine, adds nothing to its probability, and will refer, with equanimity, to the words of his great master: "Une fable a quelque course dans une génération; elle s'établit dans la second; elle devient respectable dans la troisième; la quatrième lui élève des temples." (Voltaire, *Traj. sur l'Histoire.*) I am, etc.,

H. Maudsley, M.D.Lond.

Cheadle, near Manchester, March 18.

SPONTANEOUS EXPULSION.

Letter from R. Prosser, Esq.

Sir,—In your last number, Mr. Thomas relates a case of spontaneous evolution. Now, I think it very probable that what actually occurred in the case he relates was what has been described by Dr. Douglas of Dublin as "spontaneous expulsion". The great probability is, that the hand was not drawn up, but that the child was doubled up by the pains, and the breech forced down.

A case of this nature occurred in my practice last year, the facts of which I will briefly give. When I first examined the patient, the arm was protruding externally. While I was considering how to act, the breech was actually forced down without the arm being drawn up, and a *full-grown* child was born in a few minutes. I did not remove my hand from the time I introduced it until the child was born.

I am, etc., R. Prosser.

Bromsgrove, March 26th, 1861.

Large Heart. Some time ago, at the New York Pathological Society, a heart was exhibited weighing four pounds six ounces, which was taken from a patient thirty years of age, following the occupation of a shipbuilder.

Medical News.

Royal College of Physicians of London. At the Comitia Majora, held on Monday, March 25th, 1861, the following gentlemen, having undergone the necessary examination, were duly admitted members of the College:—

Broadbent, Wm. Henry, M.D., Upper Seymour Street W.
Corfe, George, M.D., Nottingham Terrace, Regent's Park
Rogers, John Henry, East Grinstead, Sussex
Webb, Allan, M.D., Calcutta

The following gentlemen, formerly Extra-Licentiates of the College, were also admitted members:—

Bull. Martin Meggison, Jersey
Lancaster, Joseph, Clifton
Roberts, John, M.D., Salisbury
Walsh, James, Her Majesty's ship *Hogue*
Witt, Charles, Spring Gardens

At the same Comitia—

Wynter, Andrew, M.D., Coleherne Court, Old Brompton,

was admitted a member, having been previously elected under a temporary bye-law (now expired).

Also, at this Comitia, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Blenkinsop, William Henry, Binfield, Berkshire
Downing, Samuel Dawson, Birkenhead
Pyburn, James, Newcastle-upon-Tyne
Slayter, William Bruce, Westminster Hospital
Steele, Charles, Clifton

Royal College of Surgeons of England. The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery, at a meeting of the Board, on March 20th:—

Colah, Muncherjee Beramjee, Bombay; diploma of membership dated January 30th, 1861
Cumpstone, William, Market Rasen, Lincolnshire; April 5, 1853
Griffiths, Francis Thomas, Sheffield; January 31, 1861
Harris, William, Newport, Tipperary; March 10, 1854
Kerswill, George, St. Germans, Cornwall; November 13, 1860
Negri, Athenodore de, London; January 30, 1861
Tanner, Mark Batt, Exeter, Devon; July 31, 1860
Thomason, Wm. Jas.. St. Bartholomew's Hospital; Jan. 31, 1861
Thompson, Daniel Robert, Madras; January 31, 1861
Travers, William, Charing Cross Hospital; April 17, 1860
Ward, Henry, Diss, Norfolk; November 14, 1860

Apothecaries' Hall. On Thursday, March 14th, the following licentiates were admitted:—

Buszard, Frank, Lutterworth
Caudle, A. W. W., Henfield
Crutchley, H., Market Drayton
Date, W., Cirencester
Eddowes, W., Pontesbury
Mercer, J., Leicester
Tyburn, J., Newcastle-upon-Tyne

APPOINTMENTS.

Hunt, Benjamin, Esq., elected Ophthalmic Surgeon to the Queen's Hospital, Birmingham.

Parker, S. A., Esq., elected Dental Surgeon to the Queen's Hospital, Birmingham.

Royal Navy. The following appointments have been made:—

Davis, Francis W., Esq,, Assistant-Surgeon, to the *Marlborough*.
Loney, Henry, Esq., Surgeon, to the *Racoon*.
Mackay, Alexander E., Esq., Surgeon, to the *Marlborough*.
Siccama, Rinso R., Esq., Assistant-Surgeon, to the *Impregnable*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Coulson, W, J., Esq., to be Surgeon 23rd Middlesex R.V.
Gilson, J. T., Esq., to be Surgeon West Essex Militia.
Sandford, F. J., Esq., to be Surgeon 2nd Administrative Battalion Shropshire R.V.

To be Honorary Assistant-Surgeons:—

Wheatcroft, J., Esq., 22nd Staffordshire R.V.

BIRTH.

Roper. On March 17th, at Exeter, the wife of *C. H. Roper, Esq., of a daughter.

DEATHS.

Ferrus, M. le Dr., aged 75, in Paris, lately.
Fripp, James, M.D., at Clifton, aged 60. on March 15.
Harry. On March 19th, at Paignton, aged 79, Sarah, widow of John Harry, M.D.
Murray. On March 22nd, at 17, Green Street, Herbert F., infant son of G. C. P. Murray, M.D.
*Rendell, Chas., Esq., Westbury-on-Trym, aged 46, on March 22.

Statistics of Craniotomy. The operation of craniotomy is said to be performed in Germany once in every 1944 labours; in Paris once in every 1628; in France at large once in every 1200; in Vienna once in every 688; in England once in every 340; in Ireland once in every 106 labours.

Scurvy. Two thousand eight hundred and three cases of scurvy were reported as occurring in the little army of the United States for five years ending on the 31st of December, 1859; the army being of an average strength of less than fourteen thousand men. The cause of the disease seems clearly traceable to red-tapism orders.

Medical Vacancies. The following appointments are vacant:—surgeon to the Lock Hospital, Manchester; surgeon to the Sussex and Brighton Infirmary for Diseases of the Eye; medical officer for district No. 3 of Narberth Union, Pembrokeshire; physician to the Metropolitan Dispensary, Fore-street, Cripplegate; junior resident surgeon, and resident surgeon-accoucheur to the Birmingham General Dispensary.

The Sanitary State of the Army. A meeting of the Royal Commission on the sanitary state of the army in India has been held at the War-office, Right Hon. Lord Stanley, M.P., in the chair. The other commissioners present were,—Sir Proby Cautley, Sir Ranald Martin, Colonel Greathed, Colonel Durand, Dr. Gibson, Dr. Sutherland, and Dr. Farr. Mr. T. Baker, the secretary, was in attendance.

A Nostrum. Captain Cox tells us that when he was in Ava a wealthy criminal was executed, and that the King's physician secured the tip of his nose, his ears, tongue, and lips, with a little of his blood, to form a nostrum to ensure longevity to any one who received it from His Majesty's hand. It is to be hoped that homœopathic doses only were administered, or few would have a stomach for longevity under such treatment.

A Notion about Doctors' Uniforms. We learn from a *Philadelphia Medical Journal* that the European Governments have entered into negociations concerning the uniform of their military medical officers. They wish, it seems, to have one uniform costume for doctors, in order to save them from the chance of being knocked over, whilst engaged (during battle) in their mission of mercy!

Chlorosis, M. Aran tells us, is very hard of cure. Its best remedy is iron, but how the remedy acts no one knows; almost the whole of the iron injected is ejected with the fæces. It matters not which preparation we use; the cheapest is the best. After all, the steel is only a palliative; and it must be continued for two or three years. All other hygienic aids must be practised; but do what you will the souffle will remain, or at all events continue up to an advanced period of life.

Venesection. "The practical position of an author often decides the turn which he takes in forming a system. Pinel, the timid innovator of his day, was the physician of the *old* at the Salpêtrière, and he there established the rule of never resorting to blood-letting. Bouillaud, the bold innovator of our age, was the medical attendant of the *young* and vigorous soldier at Val-de-Grâce; and there he established his rule of always bleeding in disease." (*Flourens.*)

The Uses of Secret Medicines. "I had ordered," writes a French doctor, "for a patient tincture of *Guaco*, and pastilles of *Dehau*. Finding that these precious remedies were without effect, I investigated the cause, and found that the *pharmacien's* shopman had declared that my prescription was very badly written, and that what I really meant to order was tincure of *Gaiac* (guiacum), and pills of *Dehaut*. And these accordingly he had sent to the patient."

Specific Gravity of Eggs. The following facts have been established by a series of experiments performed by M. J. Labiche, of Louviers. 1. Newly-laid eggs have not all the same specific gravity (placed in a solution of chloride of sodium, specific gravity 1060, some sink, and others swim). 2. Every egg that falls to the bottom of a solution of chloride of sodium, specific gravity 1040, can be used in cooking; those that float *in* the liquid are not sufficiently fresh for that purpose; those that swim *on* the surface are spoiled.

Suicide of a Surgeon. On Saturday, an inquest was held at the London Hospital, on the body of John Bride, aged 48, a medical practitioner, residing in Shadwell. Deceased suffered from disease of the heart, for which he was in the habit of taking chloric ether. On the evening of Tuesday last, he was discovered to have taken a large quantity of opium, and although he was removed to the London Hospital, and every effort made to save his life, it was ineffectual. The jury returned a verdict of "Temporary Insanity."

Representation of the Scotch Universities. The Town Council of Edinburgh has resolved, by 19 to 7, to petition parliament not to grant a member to the Scotch Universities, being thus almost the only public body north of the Tweed that has actively opposed the movement for Scotch University representation. Mr. Macnight having, according to notice, moved that the council petition parliament to grant a representative to the Universities of Scotland, Mr. Duncan M'Laren moved that the council petition parliament to a contrary effect. The amendment was carried.

Lycopodium. This question, What is the best powder to be used in rolling pills? has been recently answered by a writer in the *American Journal of Pharmacy*, who states that all inodorous pills are best rolled in lycopodium, because this powder, being very light, extremely fine and smooth, gives the pills a uniform appearance, and its tasteless and inodorous property is very desirable. Where the bitterness of a pill will be objected to by the palate, it is well to roll them in a mixture of one part of powdered liquorice-root, to two parts of lycopodium, which will also give an even surface or coating to the pill, while its taste will be somewhat disguised. For quinine pills, however, finely sifted arrow-root ought to be employed, as it preserves their original white colour. (*Chemist and Druggist.*)

Extraordinary Human Skeleton. As the workmen employed in sinking a foundation for the enlargements now being made in the parish church of Mullingar, Ireland, were pursuing their work at the east end of the building, they discovered, amongst the other remains of human beings, the perfect skeleton of a man, measuring over seven feet in length, and which appeared from the immense size of the skull and other portions—such as the bones of the hands, jaw-bones, etc.—to have equalled in its other dimensions its extraordinary height. Its position was considerably deeper in mother earth than that at which human skeletons are generally found. There was barely sufficient appearance of a coffin to prove that it had received proper interment, but everything connected with it indicates its having occupied its lonely tenement for several centuries.

Not a Bad Yankee Notion. The *American Medical Times* suggests the following sensible mode of curing quackery:—"Medical men justly deplore the ignorance of the public as to the distinctions between true and false systems of medicine. Let us suggest a simple and effectual method of enlightening the popular mind. During the winter, when popular lectures are so well attended, let the country physician engage to give a series of lectures in his lyceum, tending to instruct his neighbours in those general principles which underlie scientific medicine. We are satisfied that physicians may thus not only make themselves useful by the instruction they give, but may establish on a firm basis, in the communities where they are located, the claims of legitimate medicine."

Vital Statistics of Scotland. The sixth annual report (for 1860) of the Registrar-General of births, deaths, and marriages in Scotland has been laid before parliament. It is but a bare statement of the figures for each county, without note or comment. During the year 105,704 persons were born, 68,055 died, and 42,236 were married. As the population of Scotland was estimated at 3,152,478, the rate per cent. of the births was 3.353, of the deaths 2.159, of the persons married 1.340. The birth rate and the marriage did not differ materially from the average of the preceding five years; but the deaths were considerably above the average, which is scarcely an appreciable fraction over 2 per cent. In England, in the same year (1860) the birth rate was higher—namely, 3.418, and the death rate was lower, 2.113; the rate of marriage is not yet ascertained, but it is always above that of Scotland. On the other hand, Scotland had 9,631 illegitimate births registered in the year, above 9 per cent. of the whole number of births, and the proportion registered in England is not very much more than two-thirds of that.

The Will of Dr. Baly has just been proved. The personality was sworn under £7,000. He was unmarried. The dispositions are as follow:—He bequeaths to his cousin, Marie Josephine Fauvell, a policy on his own life in the Crown Insurance Office, so recently effected as the 8th of April, 1859, directing that the amount arising therefrom should be invested, and the dividends applied to her education and maintenance, and the principal sum handed over to her on her attaining maturity. The Doctor bequeaths any other policy that he may have effected to his sister Elizabeth Baly. The deceased possessed a third part of a freehold estate left to him by the will of his late father: this he has given between his two sisters, Mrs. Shipp and Miss Baly—Mrs. Shipp to hold her portion for life, with the power of disposition by will, and, should she fail in so doing, it is to devolve upon her sister, Miss Baly, if living; but if deceased, it is then to revert to the testator's cousin, the before-named Miss Fauvell. The residue of his property is to be divided in the same manner for the benefit of his sisters as the freehold property is left. There is no other disposition in the will.

New Form of Iodide of Potassium. Although iodide of potassium when pure will endure a high temperature without undergoing decomposition, Mr. Piffard found that when intimately mixed with about equal parts of ether, magnesia, silicic acid, baryta, or fused boracic acid, and raised to a red heat in a crucible, copious fumes of iodine are given off; and that, if the contents of the crucible be afterwards dissolved in water and filtered (which is easy in the case of the magnesia or silicic acid), the liquid will contain an iodide of potassium having properties different from that of the ordinary iodide. The heat should be continued as long as any scent of iodine is given off, otherwise the decomposition will not be complete. This iodide differs chiefly from the ordinary iodide in the amount of precipitate produced by acetate of lead being less, owing to the smaller quantity of iodine contained in it; also in its being less easily crystallised. Bromide of potassium appears to undergo a similar decomposition under similar circumstances; as, when mixed with the above-mentioned substances, and subjected to heat, fumes of bromine are distinctly visible. (*Chem. News.*)

Below the Atlantic. Soundings in the Atlantic have been particularly pushed forward, and have excited, on account of the telegraph cable, more general interest than any others yet taken. They have revealed the fact that at least 230 miles from the coast of Ireland the water is still shallow; or, in other words, that there is another Ireland only waiting to be raised—thus reversing the famous panacea for keeping the country quiet. It is just beyond this that the true Atlantic begins—the gulf suddenly sinking to 9,000 feet. Thus, Ireland may one day have a coast-line as high as the Alps. The whole floor of the Atlantic is paved with a soft sticky substance, called ooze, nine-tenths consisting of very minute animals, many of them mere lumps of jelly, and thousands of which could float with ease in a drop of water; some resembling toothed wheels; others, bundles of spines or threads shooting from a little globule. Some, however, are endowed with the property of separating flints from the sea water—which is more than every chemist could do; and there are hundreds of square miles covered with the skeletons of these little creatures. Part of this ooze is doubtless from the clouds of rain-dust which rise from the vast steppes of South America in such masses as to darken the sun, and make the animals fly to shelter, and which, after sweeping like a simoom over the country, lose themselves in the "steep Atlantic." No bones have been found of the larger animals, so that the kraken and sea-serpent might sleep their last sleep, and leave not a bone or a vertebra to tell the tale. Not a mast or anchor, not a block or strand, not a coin or a keepsake, has been found, to testify of the countless gallant ships and more gallant men who have gone down amid the pitiless waves. (*All the Year Round.*)

Is true Ringworm Contagious? The popular belief in the extreme contagiousness of ringworm is of old standing, very firm, and very widely spread. It is also supported by the experience of most dermatologists. One or two authors however (after giving descriptions by which it is placed beyond doubt that they were writing about the disease in question), deny its contagious properties. Thus, one authority writes: "This disease is not contagious;" and adds, "that it is not communicable by inoculation." I am not aware that any evidence is on record supporting the view that it is not inoculable, while there are many facts conclusively proving the opposite. The experiment is one easily tried, and on such a matter the *onus probandi* certainly rests with those who deny it. Mr. Erasmus Wilson, after broaching the theory that the supposed cryptogamic sporules are in reality oil-globules, the result of fatty degeneration of the hair-shafts, has the following extraordinary passage:—"Another consequence naturally follows the admission of the explanation here given, which is, that this disease being inherent in the hair, and being due to an abnormal nutrition of the system, is in nowise contagious. I need scarcely observe, that this is a question of the utmost importance as affecting the peace and happiness of families and the education of youth. The disease occurs as commonly among the children of the wealthy as among the poor; and when the idea of contagion is entertained the scourge is rendered doubly severe." Thus it would appear that a theoretic conjecture as to the pathology of the affection is to decide this important question, there being no need for clinical investigation as to what is really the fact. Let me ask any one who has glanced ever so cursorily over the cases I have cited whether he would like to try to "secure the peace and happiness of a family," or "promote the education of youth," by assuring an anxious mother, or the head of a children's boarding school, that the disease in question cannot spread by contagion, and that no precautions need be taken? The clinical proof of the contagiousness of true ringworm is as conclusive as is that of similar nature in respect to scabies. (*Mr. Hutchinson.*)

Aberdeen University: the Election of a Lord Rector. According to the Journals, the students of Aberdeen University lately indulged in a disgraceful riot on the occasion of the installation of Mr. Maitland as Lord Rector. Here is an account of this Celtic exacerbation of wrath, or fun, or folly:—"Half an hour before the proceedings commenced, the students began to assemble in the hall of the university, and before two o'clock about 600 were present. The disturbance soon commenced, first in a very Babel of noises, followed by the breaking of forms, the woodwork being hurled without ceremony at the supporters of Mr. Maitland. Yells, whistlings, and 'most unearthly sounds' were continuously kept up until the arrival of the Lord Rector elect and his friends. Full vent was then given to the fury of the students. Pieces of wood, peas, barley, and other missiles were flung at the officials, the Principal and the Solicitor-General coming in for a liberal portion of the assailing shower. The former attempted to open the proceedings with prayer, but at this movement the shoutings waxed louder and louder, and peas rattled on his face and body. For five minutes wild clamour prevailed, and then another effort was made to open the proceedings, amidst great confusion. When the Principal was about to administer the oath to Mr. Maitland, several of the students, attended by legal agents, made a formal protest against the election, on grounds of incompetency and illegality. When the new Lord Rector attempted to deliver his address, missiles were furiously hurled at him, and a piece of wood striking him upon his nose caused blood to trickle down his face. Windows were broken, a door burst open, and for a long time the wildest confusion prevailed, despite the efforts incessantly made by the university officials to restore order. After a manly appeal from the Lord Rector, the students became comparatively quiet, when, with but little interruption, the inaugural address was delivered."

Inquest on a Criminal Lunatic. Mary Ann Brough, nurse to the Prince of Wales, who it will be recollected was acquitted, on the ground of insanity, on a charge of murdering six of her children at Esher, in the month of June, 1854, was removed to Bethlehem Hospital. The evidence of Dr. Hood went to show that deceased, at the time of her admission had very good health. Shortly afterwards, however, she exhibited symptoms of mental derangement, which made him believe that organic disease was going on in the brain, and had been so for some time. She went on very well up to November 10th, 1856, and on that day had a paralytic attack. That attack, however, gave way to some extent; but on December 4th, 1858, she had another attack of apoplexy, followed by paralysis, chiefly affecting the mouth and tongue. On September 27th, 1859, she had another attack, which affected the legs, and she almost lost the use of them, and her mind became much weaker after this third attack. On January 30th, 1861, she had another slight paralytic attack, and very soon after she became so weak that she was unable to sit up, and a water bed was provided for her. She remained in that condition until the 17th inst., when she lost all consciousness, gradually and rapidly sank, and died on the evening of the 18th. The cause of death was paralysis resulting from apoplexy, called serous apoplexy. In answer to the coroner, Dr. Hood said insanity had something to do with the cause of death; and although there was considerable doubt expressed as to the propriety of the verdict—for when she was tried there was not much evidence to prove her insanity—yet he had no doubt that even then the brain was diseased, and that she committed the act while under the influence of insanity. Especially so, as it was proved some years before the trial she was attacked with paralysis of one-half of the hemisphere of the brain, by which the brain itself would to some extent be affected. She had lucid intervals to enable her to enter into conversation, but as her mind was very depressed, he did not think she had any proper consciousness of the enormity of her crime. She was aware of the reason for which she had been sent to the hospital, but in consequence of her weak and depressed state, if she had said that she was the greatest sinner that ever lived, from the state of her mind, he doubted if any confidence could be placed as to her consciousness of what she said. After some further evidence, the jury returned a verdict of "Natural death."

Flints in the Drift. At a late meeting of the Ethnological Society, the subject of the flint implements found associated with the bones of extinct animals in the "drift" was discussed. Many archæologists and geologists took part in the discussion, among whom were Sir Roderick Murchison, Professor Owen, Professor Quekett, Mr. Waterhouse Hawkins, Mr. Pengelly, Mr. Pettigrew, Mr. Planché, Mr. Savory, Dr. Lee, etc. The discussion was opened by Mr. Pettigrew, who explained how the subject was originally brought into consideration in this country by the presentation to the Archæological Association, in 1848, of a number of flint implements found in the drift near Amiens, by M. Boucher de Perthes. Those implements, and a larger collection of others, contributed by Dr. Hunt and others, were displayed on the tables. Mr. Wright said that he considered the flint implements exhibited were intended for the chase or for domestic use, and not for the purposes of war. Mr. Evans explained the exact position of the stratum of gravel from which he had extracted some of these implements. It was a stratum of coarse freshwater gravel, lying on chalk, and containing fossil bones of extinct animals, among which was the entire skeleton of an extinct species of rhinoceros. Overlying the gravel was a stratum of sandy marl, containing shells of existing species, and above that was a thin stratum of brick earth. The flint instruments were extracted at a depth varying from 20 to 30 feet from the surface, and he felt convinced that the gravel in which they were found had not been disturbed. The same opinion was formed by every one who had visited the spot, and there seemed to be no doubt whatever that the gravel and the flint implements were deposited at the same time. It was possible that the animals supposed to have become extinct before man was created might have continued to exist to more recent periods than had been supposed; otherwise it would appear that the implements were fashioned by a race of men that had also become extinct. Sir Roderick Murchison confirmed Mr. Evans's view of the great antiquity of the stratum of gravel in which the implements were found, and observed that, without the presence of fossil bones of extinct animals, the surface of the country proved that there must have been an enormous lapse of time since the gravel was deposited. The possibility of the continuance of species of animals supposed to have become extinct was, he said, rendered probable from the fact that there were now living in a forest in Poland animals which had previously been considered extinct. In the subsequent discussion, it was stated that flint implements of the same character as those on the table had been found in various parts of the world, and that they were still used by many savage tribes. Mr. Botfield, in concluding the proceedings of the meeting, remarked on the circumstance that no bones of man had been discovered accompanying the flint implements, and he expressed his assurance that the cause of religion would have nothing to fear but everything to hope from scientific inquiry.

ADULTERATION OF BUTTER. Dr. C. Bagot of Dublin tells us, that one pound and a half of nice-looking and particularly well-tasted butter, purchased at his residence, contained only three-quarters of a pound of unadulterated butter, showing a water-adulteration of exactly *fifty per cent.* "By what process so large a quantity of water as fifty per cent. could be incorporated with butter is to me a mystery," he says. The method usually resorted to is that of reducing the butter to a semi-fluid state over the fire, and then stirring in salt and water along with it as it cools. Hassall, in his book on the *Adulteration of Food,* gives 28·60 as the largest quantity of water detected in butter sold in London. The purest example from Tralee contained only 0·25 of water. Water can be detected in butter by a very simple process indeed. It is but necessary to melt a suspected portion, pour it into a clear narrow bottle, and place it near the fire. The water will subside and the butter float on the surface. (*Dublin Med. Press.*)

REPEAL OF THE MEDICAL UNION IN AMERICA. The *Atlanta Medical and Surgical Journal* has an article in which it favours secession, and advocates the disruption of the American Medical Association into two sectional halves. It says,—"It is in medicine as in religion and politics; so long as we are contented with being tributaries and tamely submit to the most unreasonable fanatical dogmas, all is well; when these cease, war commences." The *New Orleans Medical News and Hospital Gazette* hopes for the continuance of the Union. The *St. Louis Medical and Surgical Journal* takes a similar position; the *Nashville Journal* also. There is no danger of a disruption of the American Medical Association. Medicine is cosmopolitan, and in spite of the *Atlanta Journal*, the day will never come when science will be made subservient to the interest of selfish demagogues. (*Medical and Surgical Reporter.*)

BIG WAVES. When the great ocean is disturbed it forms surface-waves, which are sometimes of great magnitude. In a gale, such waves have been more than once measured, and it is found that the extreme height from the top to the deepest depression of large storm waves has been nearly 50 feet, their length being from 400 to 600 yards, and their rate of motion through the water about half a mile a minute. Such waves, breaking over an obstacle of any kind, or mingling strangely with the clouded atmosphere raging above, are the wildest, grandest, and most terrible phenomena of nature. When they approach land they break up into much smaller bodies of water, but these are often lifted by shoals and obstructed by rocks till they are thrown up, in masses of many tons, to a height of more than an hundred feet. The tidal wave is another phenomenon of water motion of a somewhat different kind, producing an alternate rise and fall of the water over all parts of the ocean every twelve hours. In addition to the true waves, there are also many definite streams or currents of water conveying large portions of the sea from one latitude to another, modifying the temperature of the adjacent land, and producing a mixture of the waters at the surface or at some depth which cannot but be extremely conducive to the general benefit of all living beings. Storm tides, or those waves which occasionally rush without any pause along narrow and confined seas or up funnel-shaped inlets, have occasionally proved disastrous to a fearful extent. Thus it is recorded that upwards of 100,000 persons perished in the year 1232, and again in 1242, in this way; numerous complete villages and towns being washed away by a wave advancing from the North Sea over the low lands of Holland. Between Nova Scotia and New Brunswick the ordinary spring tide often rises to a height of a hundred feet, sweeping away the cattle feeding on the shore. (*All the Year Round.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......	Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.
TUESDAY.	Guy's, 1½ P.M.—Westminster, 2 P.M.
WEDNESDAY...	St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.
THURSDAY.....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.
FRIDAY.	Westminster Ophthalmic, 1·30 P.M.
SATURDAY.....	St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Epidemiological, 8 P.M.: Mr. J. N. Radcliffe, "On a Tract on Plague by Dr. Gilbert Skeyne, Medicinar to King James VI of Scotland"; Dr. Grant, "On the Climatology, Topography, and Diseases of Hong Kong."—Entomological, 8 P.M.—Medical, 8.30 P.M.: Clinical Discussion.—Royal College of Physicians, 8.30 P.M.: Dr. Beale, "On the Structure and Growth of Tissues."

TUESDAY. Royal College of Surgeons, 4 P.M.: Professor Quekett, "On the Organs of Digestion."—Pathological, 8 P.M.—Photographical.

WEDNESDAY. Obstetrical, 8 P.M.: Dr. Barnes, "On the Indications and Operations for the Induction of Premature Labour and for the Acceleration of Labour"; Dr. Tanner, "On a New Form of Vaginal Pessary."—Society of Arts, 8 P.M.—Microscopical, 8 P.M.—Pharmaceutical, 8.30 P.M.—Ethnological.

THURSDAY. Royal College of Surgeons, 4 P.M.: Professor Quekett, "On the Organs of Digestion."—Harveian, 8 P.M.—Linnæan, 8 P.M.—Chemical, 8 P.M.

FRIDAY. Western Medical and Surgical, 8 P.M.—Archæological Institute.

SATURDAY. Army Medical, 7.30 P.M.—Asiatic.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MARCH 23RD, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....................	Boys .. 991 Girls.. 989	1980	1214
Average of corresponding weeks 1851-60		1741	432

Barometer:
Highest (Tues.) 29.918; lowest (Th.) 29.222; mean 29.375.

Thermometer:
Highest in sun—extremes (Sat.) 96 degrees; (Sun.) 58 degrees.
In shade—highest (Sat.) 57.3 degrees; lowest (Sun.) 31.8 degrees.
Mean—41.3 degrees; difference from mean of 43 yrs.—0.6 degs.
Range—during week, 25.5 degrees; mean daily, 15.8 degrees.

Mean humidity of air (*saturation*=100) 94.

Mean direction of wind, W. and S.W.—Rain in inches, 0.69.

TO CORRESPONDENTS.

*_** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

MEDICAL PRACTITIONERS IN JAMAICA.—SIR: In an answer to correspondents in the *Lancet* of this day, I find it stated that Jamaica is deficient in medical practitioners. Can you inform your readers—members of our Association—what others of our colonies are in a similar condition; and whether the local Government encourage medical immigration? To whom should one apply? and in what manner could one discover any vacancies that might occur in the Public Medical Staff of any of our Colonial cities, whether in Jamaica or elsewhere? I think answers to these inquiries would be grateful to many of our hard-worked poor-law brethren; and would, at the same time, greatly oblige your obedient servant,

M.D. S.A.

A Further Suggestion.—Sir: In your Notice to Correspondents of March 23rd, I have read with pleasure "A Good Suggestion". May I be allowed to give you another: that the address and qualification of each member be added. Many of the members have received additional qualifications to what they formerly had. I know many of your Journals are wrong directed: Doctors and Physicians are styled Surgeons, and so on; whereas, a perusal of the last *Medical Directory* would soon put the thing in order, and no doubt but it would be more pleasant to the feelings of the members. I beg to congratulate you on the great improvement you have made in the Journal since you have become editor; and trust that my remarks may not be hurtful to your feelings, as they are given with an ardent desire to promote the interests of the British Medical Association. I am, etc.,

March 25th, 1861. A Member.

[We are always glad to receive an useful hint; and beg to assure our correspondent that an editor is devoid of feelings.]

Hydropathy and Suicide.—Sir: I had thought that the frequency of suicides at hydropathic establishments was an admitted fact. We had one in the precincts of this town a few years ago, which, though built for the purpose, failed to attract more than a very scanty modicum of patients. It was open about four years; and the coroner informs me he held two inquests on gentlemen who committed suicide while under treatment during that period. I well remember the great impression the inquests made on the public mind; but as such events usually attract notice only in local newspapers, they are not easily collected into a statistical form. Some of our associates who have access to the coroner's records at Malvern and elsewhere, can doubtless ascertain whether my assertion, which you wish corroborative evidence regarding, is true as respects other establishments of the kind.

I am, etc., John Barclay, M.D.

Leicester, March 20th, 1861.

Dr. McClintock.—No Code of Ethics has been issued by the Association. Ethical Committees have been formed on several occasions for the purpose of considering such a code. There is a Medico-Ethical Association at Manchester, which has now been many years in vigorous existence. Perhaps Dr. McClintcck would find the laws of that Society worthy his attention. He will doubtless obtain them on application to Dr. Stone, of Oxford Street, Manchester.

Mr. Toynbee's Paper in last week's Journal should have had a second heading; viz., "Molluscous Tumours in the External Auditory Meatus, their Effect upon the Petrous Bone and the Brain, with Suggestions regarding their Treatment."

SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 1861.

COMMUNICATIONS have been received from:—Dr. McWilliam; Dr. David Nelson; Dr. J. G. Davey; Mr. Augustin Prichard; Dr. J. G. Swayne; Dr. W. Roberts; Mr. Toynbee; Dr. Graily Hewitt; Dr. P. H. Williams; Mr. W. Copney; Mr. Stone; Dr. Meran; Mr. Roper; Mr. May; Dr. McClintock; Dr. Kidd; Mr. S. Wood; Dr. Wybrants; Mr. Gillibrand; Mr. Jessop; Dr. Plowman; Mr. S. F. Bridge; Mr. Dulvey; Dr. F. Page; Mrs. Baines; The Registrar-General; and Mr. R. Prosser.

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Practical Observations
ON
"SUPPORTING THE PERINÆUM."

BY
GRAILY HEWITT, M.D., M.R.C.P.,
PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL; LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

[*Continued from page 326.*]

Having shown how contradictory are the statements of authorities as to the effects, objects, and advantages of the procedure "supporting the perinæum", I proceed in the next place to examine the procedure itself, with the view of ascertaining the effects actually or necessarily produced by it. Such an examination will place us in a position for judging whether the "objects" of the procedure are legitimate ones, and whether the advantages supposed to accrue from it are real, or only imaginary.

It is not necessary to occupy space by a minute description of the operation "supporting the perinæum"; it is familiar enough to all. The directions given by obstetric authorities as to the "method" to be pursued amount, in substance, to this—that, when the head of the child has begun to distend the perinæal structures, pressure should be applied to the perinæum by means of the hand, a napkin being generally directed to be interposed. By some, the pressure or support is directed to be applied early, and kept up during the access of the pains, until the head and shoulders be expelled; by others, the time at which the support is to be commenced is fixed somewhat later, and nearer to the time at which the birth of the head may be expected to occur. All the recent writers whose opinions I have quoted agree in all essential respects as to the *manner* in which the "support" should be applied. The perinæum is to be pressed "forwards". There is a difference only as to the "force" to be used, and as to the period of the labour at which it is to be commenced.

Such pressure, such support, must have an effect —1, on the head of the child; 2, on the perinæum itself.

1. *Its Effects on the Head of the Child.* The pressure exercised primarily on the perinæum acts secondarily on the head of the child. The lines representing respectively the *effect* of the pressure as usually exercised, and the axis of the outlet of the pelvis, are practically nearly coincident; the effect on the head of the child is that of a pressure exercised directly upwards, and immediately in the axis of the pelvis. I say practically speaking; for, according to a well known law in physics, the combined effect of the passive resistance of the pubic arch anteriorly, and the active resistance of the hand of the operator posteriorly, resisting the contraction of the uterus above, is that which has been represented.

Clearly, then, it will be said, the pressure in question has one tendency; viz., to retard the advance of the fœtal head. At first sight, this proposition carries truth on the face of it. Will it bear examination? It is remarkable that, by one obstetric authority, supporting is recommended in order to retard the advance of the head; while we have it on the statement of another, that the pressure actually accelerates its progress. As previously stated, Dr. Rigby expressly remarks that he has found this effect from it, and that Madame La Chapelle had observed the same thing before him; and Dr. Tyler Smith particularly calls attention to the effect of pressure on the perinæum in exciting reflex action of the uterus, and in thus accelerating the progress of the labour. As a matter of experience, then, and as a deduction from theory, we find it stated on the one hand, that the pressure does accelerate the advance of the head; on the other, we are told that the object of the support is to retard the advance of the head. How are these conflicting statements and opinions to be reconciled?

Looking at the facts of the case, it seems hardly likely that any pressure exercised from without could have much *direct* effect in retarding the advance of the head, unless a tolerable amount of force were used. The force and power of the uterine contraction is, it must be remembered, in many cases something remarkable. In those particular cases in which support is most recommended—where, in the last stage of labour, the uterus is acting with very great vigour, and the perinæum is subjected to considerable pressure—the force required to counteract in any degree these uterine contractions, to render them inoperative, must be something infinitely greater than that capable of being exercised by the mere pressure of the hand from without. There are some operators who probably *do* apply their pressure in a manner calculated to have some such effect in retarding the head. Dr. Ramsbotham's plan of placing the elbow on the bedstead, and rendering it a fixed point against which the head is allowed to be protruded, must be one calculated to offer almost as much resistance in one direction as the pubic arch does in the other; and that this plan has an effect in retarding the progress of the head, would seem evident from the length of time ("many hours") during which Dr. Ramsbotham has occasionally been "compelled to remain by the side of the bed". It is not to be wondered at that the duty should be found "exceedingly fatiguing". On the other hand, if the pressure be slight in degree, it must be *mechanically* perfectly useless as regards its direct effect in retarding the advance of the head.

The *acceleration* in the advance of the head experienced by La Chapelle and Drs. Rigby and Tyler Smith, as a consequence of supporting the perinæum, now requires to be dealt with. The explanation given by Dr. Tyler Smith of this fact does not appear to me to include the whole truth. Is not the acceleration due rather to the effect of the resistance offered to the advance of the head of the child, than to the excitation of reflex action? Any resistance to the action of the uterus calls that action into more violent and powerful manifestation, as is well known; and I should be disposed to explain the beneficial "accelerating" action of pressure on the perinæum in this manner. I am at the same time quite prepared to admit that reflex contraction of the uterus may be set up by continual pressure on or by irritation and manipulation of the perinæum. All I contend for is, that this is only a part of the explanation.

The conclusions to be drawn from these considerations are, that extreme degrees of pressure may retard the advance of the head; that a slighter degree of pressure either accelerates, by exciting uterine reflex action, or has no effect whatever on, the advance of the head; from which it necessarily follows that those who recommend moderate support of the perinæum, with the view of retarding the advance of the head, recommend that which is, mechanically speaking, useless.

It will be observed that the question of the advisability of retarding or accelerating the advance of the head, in order to preserve the perinæum, has not now been touched upon. This is a perfectly distinct question, and will receive attention in its proper place.

Another effect of supporting the perinæum, which has been alluded to by most writers on this subject, is that of *directing the head forwards*, and thus relieving the perinæum from pressure; and, as considerable importance appears to be attached to this element of the procedure, it is necessary to examine it somewhat particularly. Drs. Lee, Rigby, Churchill, and Tyler Smith, all agree in recommending that the head should be *directed forwards*. But how is this to be done? Anteriorly, we have the hard resisting arch of the pubes. Endeavouring to press the head forwards against this would seem purposeless and futile in the extreme. When the head is engaged in passing through the os externum, under ordinary circumstances, let any one attempt to pass the finger between the head and the arch of the pubes, and it will be found that the head and the arch of the pubes are so perfectly in apposition that the passage of the finger is generally impossible—there is certainly no space to spare *there*. It is well known that the pubic symphysis is loosened during labour; but it has been found by Schwegel (*Mon. für Geburtsk.*, Feb. 1859), who has carefully examined into the matter, that this loosening does not admit of an increase in the transverse diameter of the pelvis of more than one line; and it cannot for a moment be supposed that any pressure exercised in "directing the head forwards" can give any additional *space* for the passage of the head. In certain cases of pelvic deformity, the construction of the hard parts may be such that the head is really not so far "forwards" as it should be; but these are not "ordinary" cases. More, the attempt to direct the head forwards appears to me to be actually mischievous, by pressing it still more forcibly, if that were possible, against the pubic arch, and thus interfering with its passage beneath the arch. *Indirectly*, the effect of such pressure "forwards" may thus have an effect which those who recommend it have not contemplated from it; viz., the retardation of the progress of the head. It is well known that it is the part of the head which is most anterior—that, viz., which is in contact with the pubic arch—which emerges first; and the sooner this part of the head can be made to glide under the pubic arch, the better. Now, by pressing forcibly against the perinæum—that is, against the part of the child's head which is directly opposite to this—the effect must be to delay the desired emergence of the part of the head in question. If it be so delayed, while the other and opposite side advances, it necessarily happens, as those who have paid attention to the relative position of the axis of the head in delivery will perceive, that a larger diameter of the head is presented to the perinæum than would otherwise be the case. The part of the head in contact with the pubic arch advances much more slowly than that in contact with the fourchette, the head making a sweep as on a pivot, of which the fixed point is the pubic arch.

The pressure of the operator is applied, we suppose, as represented in the accompanying woodcut, in the direction of the line A B. How this pressure can assist the head in passing under the os pubis, or how it can help the head "in making its turn", it is difficult to conceive; for, until a considerable portion of the head has passed under the arch of the pubes—until, in fact, the head has advanced to a position roughly indicated by the dotted line C—mechanical pressure in the direction of the line A B will be manifestly useless in helping the head forwards. If the pressure be applied before that time, it must be injurious; if applied afterwards, it is also useless, as the difficulty in the latter case, so far as the perinæum is concerned, is at an end.

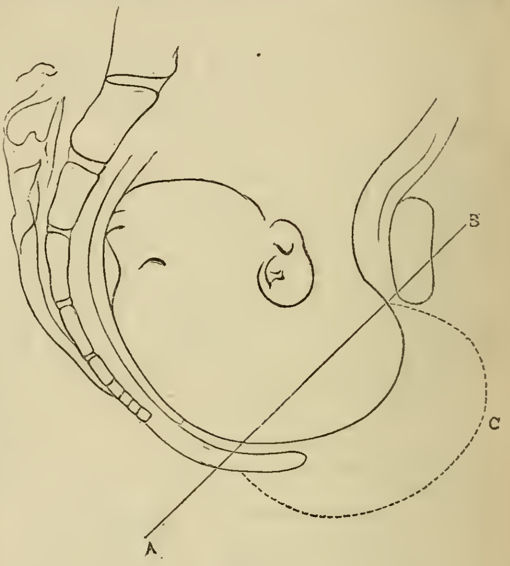

Fig. 1.

Probably the recommendation to "direct the head forwards" was based on the knowledge of the fact that the head has in certain cases actually perforated the perinæum, leaving the fourchette entire; indeed, as much is stated by more than one of the writers alluded to; and it was thought that, by following this recommendation, such an accident would be prevented. Experience has not proved this to be the case. Thus, in McClintock and Hardy's *Practical Observations in Midwifery* (p. 7), we find a case recorded where this perforation occurred in spite of every care taken to direct the head forwards. In these rare cases of central perforation of the perinæum which have been recorded, there is not the slightest proof that the fault lay in the manner in which the head was directed: the cause must be sought elsewhere.

Even Dr. Leishman, who is opposed to the practice of supporting the perinæum in natural labour, and who has evidently devoted some little thought to the whole question, does not appear to have perceived the futility of this endeavour to direct the head forwards; for he says, "Pressure against the sacrum is well known both to afford relief to the woman and to direct the head forwards." (*Loc. cit.*, page 420.)

There is an effect which might be produced on the head of the child by supporting the perinæum, by this attempt to "direct the head forward", which has not been claimed for it by the adherents to the practice in question; viz., the possible diminution of the diameter of the fœtal head presented to the perinæum by the pressure exercised from without. If the head be, as it ordinarily is, compressible, it is clear that pressure from behind would, if sufficiently strong, have a tendency to lessen that diameter of the head which lies between the hand of the operator and the resisting arch of the pubes, represented by the line A B in fig. 1. In fact, as in the case of the application of the forceps, it might be said, here you have a means of rendering the passage of the head more easy for the perinæum; and I can quite conceive that pressure might be so directed by the hand as to actually produce a tangible effect of this kind. The obvious criticism on such a mode of facilitating the delivery would be, that in the use of the forceps there is a better means of arriving at the same end. The compression by the forceps would be both more effectual and less liable to injure the soft structures which in the other case are necessarily interposed between the head of the child and the hand of the operator—the perinæum.

From this analysis of the effect of supporting the perinæum on the fœtal head itself, it seems impossible to come to any other conclusion than that its supposed useful mechanical effect on the head is very questionable. Its imagined or imaginary effect in "directing the head forwards" I think I have sufficiently disposed of.

I shall in the next place examine the effects of the procedure on the perinæum itself.

[*To be continued.*]

Effects of Gallic Acid on the Expectoration. The remarkable influence which gallic acid exerts in arresting pulmonary hæmorrhage is so well recognised that, perhaps, few remedies are more generally prescribed in this affection, and when employed in suitable cases, and in full doses, I have often had reason to be satisfied with its effects. I have also found, as might be expected, that it exerts a considerable influence in controlling excessive expectoration, and I have frequently prescribed it with this intention, and with a fair amount of success, to diminish the exhausting pulmonary discharge in cases of phthisis; but I have not yet met any case of chronic bronchitis or humid asthma which appeared to me fairly suited to test its effects. In some instances, in which I prescribed it for checking expectoration, and also in attacks of hæmoptysis, I have noticed that the expectoration in the course of a few hours, under its influence, acquired a deep black or inky-blue, distinctly traceable to the use of the drug, and disappearing when its exhibition was omitted, to return again when it was resumed. This coloration is not an invariable occurrence when using the gallic acid, but it has happened so frequently as to attract my notice in at least five or six different cases; but I cannot say why it should occur in some of these cases and not in all. It is well worth further observation." (*Dr. W. Frazer.*)

Illustrations
of
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

SYPHILITIC INFLAMMATION OF THE LARYNX: ACUTE ŒDEMA: TRACHEOTOMY: DEATH FROM HÆMORRHAGE, OCCASIONED BY AN ULCER IN THE TRACHEA.

Under the care of J. Russell, M.D., and D. Bolton, Esq.

The history of the case is necessarily very meagre. The girl was a stranger to the town, and was not in a condition to afford much information, at first from the effect of her disease, and subsequently from the loss of speech, which resulted from the operation.

N. J., aged 25, was admitted on June 23rd, 1861. She was infected with syphilis by her father-in-law, by whom she had a child two months ago. She "had first a swelling, which turned to running." Four months ago, she was salivated. Her throat had been "bad" for four months; her breathing had been "tight" for a fortnight; but was well enough to allow her to travel from Liverpool on the day of her admission. A fortnight ago, some copper-coloured tubercles appeared on her thighs, and were still very perceptible.

She was brought to the hospital at 8 P.M., in a state of even greater suffering from dyspnœa than when seen by us two hours subsequently.

The following report was taken at 10 P.M. She is greatly emaciated, and has a very cachectic appearance. Some copper-coloured tubercles are thinly scattered over her thighs, and an eruption of lichen exists upon her abdomen. The left external labium is much swollen, and indurated below, with a superficial and rather sloughy ulceration over its lower portion. She breathes with great difficulty, and with laryngeal stridor; at each inspiration, all the extraordinary muscles of respiration are thrown into action, the alæ nasi are expanded, and the corners of the mouth drawn outwards. The front of the chest is much flattened, and the upper part is distinctly drawn in with inspiration; expansion of the chest being effected solely by the descent of the diaphragm. She makes twelve respirations in a minute; pulse 132, regular; surface of body warm. There is no blueness; her face is pale; her lips are perfectly pink. The pupils are natural. The voice is feeble and nasal, but quite free from hoarseness. She has pain in swallowing; and expectorates a little transparent mucus. She complains very urgently of headache, but is perfectly clear and alert.

On examining her throat, the uvula and a portion of the soft palate are found to be deficient; and an extensive ulceration, having a sloughy aspect, covers the pillars of the fauces and the posterior surface of the pharynx. Examination of the chest gives no result further than a shade of dulness in the posterior region of the right side. Her pulse rapidly rose to 140; breathing became tighter, and the headache more intense.

At 11 P.M., Mr. Bolton performed the operation of tracheotomy; a full sized tube was introduced, and the operation was followed by very great relief to all her symptoms, though much coughing attended the introduction of the tube.

Through the three following days, her state continued most satisfactory; she slept and ate well.

On the 27th (the fourth day), the tube was removed, in consequence of a very troublesome cough through the night; and, as the orifice was free, it was not replaced.

She expectorated from the mouth a considerable amount of tenacious mucus, with salivary fluid.

The tube was replaced on the 28th; on the following day (29th), breathing was rendered difficult by the collection of stiff mucus in the trachea, but was relieved by promoting its expectoration by pouring a little water through the tube. The ulceration in the throat had assumed a more healthy aspect. She was left in a perfectly satisfactory condition; but at 5 P.M., the resident officers, Dr. Maxwell and Mr. Goodall, were summoned to her in haste, and found a large quantity of blood issuing through the tube. The hæmorrhage was very profuse; violent efforts at coughing were provoked; and, despite every means taken to arrest the hæmorrhage, blood continued to flow, until it was believed that she must have lost a pint-and-a-half in the twenty minutes during which she continued alive. At first, the blood was quite florid, but afterwards it became dark coloured. She died of mixed apnœa and sinking.

The treatment had consisted principally of tonics, with six ounces of wine, and milk; chicken was subsequently added. For three days she took iodide of potassium.

Post Mortem Examination forty hours after death. The face was very pale. Mr. Bolton removed the pharynx entire, by dividing the lower jaw. A very extensive ulcer existed in the pharynx, extending over the lateral and posterior aspect, and almost laying bare the cornua of the hyoid bone; the edges were sharp, and it burrowed above and below; some small remains of the right tonsil appeared above the ulcer. The papillæ over the back of the tongue were red, and remarkably prominent. The epiglottis and the aryteno-epiglottidean folds were firm and rigid, and enormously thickened; the folds were especially thickened, and, from the whiteness of their mucous membrane, resembled two large lobes of fat. The mucous membrane covering the epiglottis and the folds was perfectly free from ulceration; and the disease ceased abruptly and entirely at the vocal cords, the latter being perfectly healthy. The mucous membrane of the larynx below the cords was probably quite healthy—at least, no sign of disease was apparent, except a somewhat sloughy condition of the wound made by the operation.

The trachea was healthy, with the following exception:—on its posterior face was an ulcer an inch long and a quarter of an inch broad, with sharply cut and rather irregular edges, completely perforating the mucous membrane. This ulcer exactly corresponded to the back of the tube, and commenced one-eighth of an inch below the wound. The mucous membrane surrounding it was injected. Its surface presented small granulations, but no blood adhered either to it or to the pharyngeal ulcer.

The trachea contained fluid blood, especially in its lower portion, where soft coagula loosely filled both bronchi. Soft coagula extended along the tubes, in many parts to their ultimate ramifications; but no spots of pulmonary apoplexy appeared. The mucous membrane of the bronchial tubes, together with the lungs, was perfectly healthy. The heart was quite healthy, though pale; the liver was large and pale; its tissue was very indistinct; its cells were nearly free from fat; the kidneys were healthy.

The cause of the sudden attack of difficult breathing was, no doubt, acute œdema of the arytenoid folds, already so much thickened, induced by exposure during her railway journey in the fore-part of the day. The larynx afforded a good example of pure syphilitic inflammation, confined to the parts external to the cavity.

The cause of death was of a very unusual kind: hæmorrhage from an ulceration of the mucous membrane of the trachea, produced, there is every reason to believe, by the pressure of the tracheotomy-tube; the mucous membrane of the entire larynx and of the remainder of the bronchial passages was perfectly free from ulceration; and the position of the ulcer, without question, accurately corresponded to the back of the tube.

The source of the bleeding was, no doubt, the numerous small vessels supplying the mucous membrane of the trachea, precisely as the similar vessels beneath the mucous membrane of the stomach sometimes supply the blood in cases of hæmatemesis from the "perforating ulcer" of that viscus. The hæmorrhage would probably be hastened as asphyxia was induced, in consequence of escape of blood into the bronchial tubes.

It is probably not an infrequent occurrence for small ulcers to be produced by the tube in tracheotomy. In a case which occurred to me, some time ago, the patient had hæmoptysis during his convalescence, which ceased entirely after the employment of a solution of nitrate of silver; and my friend Mr. Baker has a drawing of a trachea, after the operation, in which a small ulcer corresponds to the situation of the tube. In our present case, the cachectic state of the patient, joined with the presence of the syphilitic poison, would favour the production of an ulcer; and, no doubt, the rapidity with which the ulcer was formed, together with its large size, were circumstances favourable to the occurrence of hæmorrhage. We may add, that the impoverished state of the patient's blood would also tend in the same direction.

Original Communications.

ON THE CARBUNCULAR TYPE OF DISEASE: ITS SEPTIC CAUSES, AND ANTISEPTIC TREATMENT.

By David Nelson, M.D.Edin., late Physician to the Queen's Hospital, and Professor of Clinical Medicine, Birmingham.

(Read before the Midland Medico-Chirurgical Society.)

[*Concluded from p.* 332.]

Case III. Mrs. M. B., aged about 48, first applied to me in Nov. 1856. She had been suffering from a succession of painful dark-coloured boils in all parts of her body for a period of more than four months. There were marks of the old ones that had healed up; others had burst and appeared as foul deep open sores; while fresh ones were in process of growth. For some time before these four months, she had been afflicted with nausea, dyspepsia, and general lassitude; and the catamenia had been becoming less and less regular, the fluids so discharged being often of a very offensive kind. She had poulticed the boils till they burst, or were opened; and had taken inwardly purgative medicines, along with infusion of gentian and soda. I prescribed for her use, two drachms of compound tincture of bark, with one grain of sulphate of quinine, and the sulphuric and hydrochloric acids, with hydrochlorate of morphia, thrice a day.

Dec. 1st. She reported herself much better. The deep ulcers looked healthy and were rapidly filling up, the others had greatly diminished, and no fresh one had appeared. She, however, complained of gnawing pains in her limbs and joints generally, and the urine had a great deal of pinky furfuraceous sediment; wine of colchicum was therefore added to the mixture, in moderate doses of twelve to fifteen drops.

Dec. 8th. All the boils were either gone, or fast healing. She had no pain, slept well, ate and drank well, and had no lassitude. She continued using the bark, with the mineral acids, up to Dec. 22nd, when she said she felt better and stronger than she had for several years. Here we see a debilitated constitution at the critical period of female life, irregularity and putridity of the menstrual flux, the appearance of crop after crop of boils through a period of several months, without any indications of improvement; and yet the favourable change is rapidly brought about by the treatment advocated. From all these facts there can be but one legitimate inference.

Case iv. Mrs. E. J., aged 35, consulted me on 5th October, 1857. She had three months before been confined, and had been very ill for six weeks after the delivery, suffering during that period from a continued flow of putrid matters from the uterus and low fever. The child died, and the milk left her. She then had an abscess in one of her breasts, and next came a succession of boils, which had continued to appear up to the time of seeing me. She was pale and exhausted, and was deprived of sleep from the pain of the boils. Her bowels were excessively costive; and she now took a moderate draught of sulphate of quinine, and sulphate of magnesia, with compound tincture of senna and aromatic sulphuric acid, every morning; while she had the compound tincture of bark, with iodide of potassium and morphia, midday and night.

Oct. 12. No more boils had appeared; she felt easier and stronger, and had slept well. She reported that she had had a slight reappearance of uterine discharge, and was therefore ordered tincture of sesquichloride of iron, with hydrochlorate of morphia, ergot, and hydrochloric acid, three times a day.

Oct. 20. A full discharge of the menstrual fluid was reported; the old boils were shrinking, and no fresh ones had shown themselves. Compound colocynth pills were ordered nightly if required, and she had the compound tincture of bark, with the sulphuric and hydrochloric acids, and morphia, thrice a day.

Oct. 26. She continued quite well; but was pale and weakly. She took for a time thereafter steel and quinine, and recovered her strength and colour. In this case, we have again evidence of the existence of a putrid excretion within the body; its probable absorption and natural effect upon a weakened frame; viz., the accession of mammary abscess, followed by crops of boils, and their arrest by the treatment employed.

Case v. Mr. D. W. of Moxley, aged 32, had originally been a person of great muscular and constitutional strength; but, from having had a severe accident, with subsequent prolonged illness, had become much reduced. He was engaged in mining, and had been crushed, about two years before seeing me, under masses of mineral that had fallen upon him. The chief crushings had been on one of the legs, and on the chest. Carious disease of the tibia and of the sternum had supervened, which led to fistulous ulceration of the surrounding tissues. For this he had been under the treatment of various practitioners, who had chiefly recommended him *poultices and patience;* but, sometimes, in his *impatience*, he had fled to empirics, as well as to consulting surgeons and physicians, seeking in fact for impossibilities beyond human performance. For about six weeks before he came to me, which was late in March 1859, he had had, in addition, sundry boils which deprived him of sleep, and gave him great pain. He was pale and emaciated, and extremely restless, excited, and anxious. In fact, he was in dread of impending death, as some one had told him that the breast ulcers would never stop, but would eat into his chest. However foolishly excited, he was naturally a sensible and well informed person. I told him that he had been impatient without reason; that time would be a necessary element in the cure of such a case; and that, if he maintained the powers of the constitution by tonic medicines and tonic diet, and would not worry himself with fanciful fears, nature might do all that he desired. He was ordered to have the pointing boils opened, and the orifices of the sinuses a little widened; and, while he dressed these either with black wash, or with a lotion of the chlorides of mercury and iron, he took, internally, the compound tincture of bark, with iodide of potassium, colchicum, and morphia. His diet was to consist of eggs, meat, and bread, with Dublin or London porter at dinner, and port wine negus at night. He said he had been keeping himself on low diet for fear of inflammation. Such was his idea.

April 4th. He reported himself as being, in the expressive vulgarism of his locality, "*a king*." He had, that is to say, slept well, and enjoyed his food, felt strong on his legs, and had no pain whatever. No fresh boils had appeared; while the old ones, as well as the fistulous ulcerations, had a more healthy aspect. There were some large hard lumps, like abortive boils, and a fair crop of iodic pustules. The treatment was continued.

April 18th. There were no boils whatever, and he felt well; though, of course, the carious and fistulous ulcers existed. He now omitted seeing me for more than a month; when he returned with some fresh boils, though they were of no great size. He was told he might expect such recurrences as long as the bones remained diseased. He now took the mixture morning and evening, and a pill of quinine and steel at dinner time.

May 30th. The boils had vanished again, and he was improving in every respect.

June 30th. There was no thickening of periosteum over the tibia or sternum; and the fact of the sinuses filling up with healthy tissue, and having very little discharge, and that of a healthy character, afforded proof of the improvement of constitutional condition. From this time, he either took Huxham's tincture with the sulphuric and hydrochloric acids, or when the palate tired of this, pills of quinine and iron, thrice a day.

Through July and August he steadily improved, and by the latter end of September, he was perfectly well, nothing but the skin-marks of even his injuries remaining. In this case we have a similar sequence of events, the mechanical injury sustained had ultimately affected the bones, the well known fistulous ulcers of caries had supervened, generating putrid effete fluids. These were doubtless absorbed into the exhausted system. Crops of boils appeared, and these were arrested by the tonic and antiseptic treatment. When this treatment was interrupted for a time, some more boils began to reappear; but again vanished on a renewal of the treatment. The other points of the case only bear incidentally upon the essential argument: yet, collaterally, it may be observed that the carious disease also disappeared under the treatment, in the course of time.

Case vi. Mrs. W. B. consulted me at the end of 1858. She said she enjoyed perfect health, and that I might think it foolish of her to come to me with what some of her acquaintance considered to be, not only trifling, but indicative of good condition; nevertheless it was a great inconvenience to her. The cause of her complaining was a series of small boils, considerably larger than mere pimples, and very hard and painful. They had continued to come and die off in regular succession over her cheeks, head and neck, for more than two years. She said vaguely that she had taken all manner of medicines, including sarsaparilla, cod oil, and every other pretended panacea: and applied all sorts of lotions and ointments in vain. I advised the use of mild aperients, a warm bath twice a week, and the compound tincture of cinchona, with the sulphuric and hydrochloric acids After a fortnight, the eruption had much abated, and in a month had gone.

About two months afterwards, it reappeared, and she saw me again. On this occasion, I inquired about her jaws and teeth, and learned that she had had several teeth decayed on the left side, some having been broken in the attempt at extraction, and the old stumps having been left in the sockets. The bones, she said, had been broken on those occasions, and the crops of little boils frequently commenced by the appearance of a common gum-boil. I advised removal of the decayed parts; but she put the matter off on account of former mishaps. The small boils were frequently removed by the medicine, and as frequently reappeared; but after the proper removal of the old stumps, etc., she ceased to have any more. This case was certainly merely annoying, and far from dangerous; yet I think it illustrates the same series of events as the other more serious ones; viz., absorption of decayed matter, its eruption on the surface in the form of little boils, and the alterative effects of the antiseptic treatment while it was continued.

Case vii. Mr. J. H., aged 62, came to me on 17th August, 1858. He had been excessively weak and low for several months past, and for two months had had a succession of boils, which he had been contented to have poulticed, while he took cream of tartar and sulphur inwardly every day. At length, a very large boil, or carbuncle, appeared on the nape of the neck, which compelled his more serious attention. His pulse was small, and the heart's action fluttering, weak, and intermittent. I advised immediate opening, which was effected by a good crucial incision, in the course of that day or the next, by my friend Mr. Downes of Handsworth; and he took quinine, compound tincture of cinchona, colchicum, morphia, and the acids.

Sept. 2. He felt easier and stronger, though the carbuncle was tender, and exhibited the appearance of a very deep foul cavity, containing the broken up core and bloody sanies. The other smaller boils had shrunk, and he had eaten and slept pretty well. No fresh outbreak had occurred.

He was seen on the 6th, the 13th, and 22nd of September, on which last day all the smaller boils had disappeared, and the large gap in the nape of the neck was almost closed. He reported himself strong, and fit to walk for many miles without fatigue, of which fact the heart's action gave corroborative evidence. He took for some time thereafter pills of quinine and steel, and had no relapse. I could not here distinctly trace any prior putrid infection; but it was a case in which I think the mere opening, and poulticing, and giving bland diet, would not likely have served the purpose, as the constitutional depression was so marked, and the patient advanced in years.

Case viii. A lady in Shropshire consulted me some time ago regarding the obstinate recurrence of boils over her abdomen, back and arms, and also in the perinæum. She was about 47 years of age; long married, but without any children. She had always suffered from painful menstruation; but of late the discharges had been more protracted than usual, and at the latter end had exhibited signs of putridity. The os uteri was found to be exceedingly small, and I concluded that, at the catamenial periods, there was a retention of some thickened fluid towards the end of the effort, which fluid became putrid, and was partly absorbed into the system. Under this conviction, I advised dilatation of the canal of the cervix, and prescribed, not only quinine, but a mixture of the tinctures of steel, lytta and ergot, with morphia and hydrochloric acid, to be taken twice a day ordinarily, and three times a day at the catamenial periods. Under this treatment the boils ceased to appear; while the menstrual flux came to last only four days, without pain, and without putridity. Here I felt satisfied that the sequence of events afforded proof of the truth of the general diagnosis; namely, the presence of putrid matters absorbed into the blood, giving rise to a series of boils, which vanished under the eliminative and corrective line of treatment, adopted in accordance with the theory of septic poisoning.

SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northern Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

III.—Tuberculous Disease of the External Lymphatic Glands.

[*Concluded from page* 301.]

V. It not unfrequently happens, when ulceration follows suppuration of tubercular glands, and heals without the direct attention of the surgeon, that the implicated integument remains disfigured by induration, unseemly scars, and uneven cicatrices. Under such circumstances, the use of certain measures, to be presently described, will oftentimes lead to a favourable solution of the existing disfigurement.

a. Lotions. When induration of the integument and adjacent cellular tissue results from the healing of tubercular ulcerations, it may frequently be removed by absorption, especially when it is of recent origin, and correct therapeutical means are employed. Without doubt, solutions of various salts of iodine will be found among the most valuable adjuncts which the surgeon has at his command. Mr. Erichsen, in his *Science and Art of Surgery* (3rd edit., p. 465), strongly recommends lotions of iodide of potassium and carbonate of potass: a drachm of each of the salts, with an ounce of spirits of wine and eleven ounces of water, makes, he says, an excellent application, which should be kept constantly applied to the implicated parts by means of linen or lint covered with oil-silk.

I am in the habit of substituting iodide of ammonium for iodide of potassium, as I have reason to believe that it will be found more beneficial. Sir Astley Cooper placed great faith in a solution of chloride of ammonium; and other surgeons of large experience have written in favour of the use of simple alkaline solutions. Whatever liquid applications are employed, it is all important that sufficient time should be given for a trial of their efficacy; for it oftentimes happens that a satisfactory result is only obtained after their most persistent use.

b. Unguents. When the application of lotions has failed to produce the desired effect, it will be advisable to have recourse to some more definite measures to procure absorption and removal of the indurated condition. I have experienced considerable advantage from simple frictions, especially when no abnormal tenderness has been exhibited by the implicated parts. But still greater good will oftentimes be derived from the additional use of certain ointments and oils.

When the aplastic deposits are of long standing, the use of an ointment composed of iodide of ammonium, such as already described, will often lead to gradual softening and absorption of the hardened surface to which it is applied. The great advantage of this application is, that it can be used with freedom without imparting to the skin the peculiar colour which the local employment of pure iodine produces, and whilst equally effective, or nearly so, is, in many ways, less objectionable to the patient.

When it is deemed necessary to make use of mercurial preparations, the *unguentum hydrargyri* may be selected; or, under certain circumstances, iodine and mercury may be combined in one or other of the forms previously considered. I have elsewhere spoken favourably of the use of oils, when assiduously rubbed into the integument covering an indurated gland; and I can also recommend their employment in all false hypertrophies of the skin and cellular tissue. When containing iodine, mercury, or certain stimulating substances, such as ammonia, camphor, chloroform, etc., they will be found doubly advantageous. Great care and discrimination are, however, always needed before advising friction either with ointments or oils. I have known too vigorous and oft repeated applications of these substances fraught with the greatest mischief; while it not uncommonly occurs that even a limited use of them produces an undue amount of irritation, which leads to ulceration and suppuration, and, in fact, to a reopening of the original sore. When such is the case, I have found occasional paintings with glycerine, in which is dissolved iodide of potassium or of ammonium, of great benefit.

c. Caustics. As already seen, an unseemly scar is one of the most frequent results which follow an indifferently treated attack of suppurative destruction of the external lymphatic glands. When a disfigurement of this nature causes not only personal but physical annoyance, the opinion of the surgeon will oftentimes be solicited as to the best method of obtaining its removal. Scrofulous scars (so called) generally present certain characteristics. They vary in colour from a normal to a bluish-purple tint, have a raised and unhealthy appearance, and are sparingly covered with cuticle. Under certain conditions, they prove irritable and painful, and are always more or less liable, especially when the system is impoverished, to assume diseased changes by reason of their low standard of organisation.

When a scar resulting from the healing of a tuberculous ulcer, or one in connexion with a gland which has been involved with tubercle, is of such a kind as to give rise to disfigurement, and becomes the seat of irritation and pain, its destruction may be deemed advisable, so that nature, immediately assisted by art, may more efficiently repair such structures as have through disease lost their original integrity. For this purpose, the use of various caustics has from time to time been recommended. Among those most generally selected, the following may be mentioned:—Chloride of zinc, potassa fusa, nitrate of silver, and the strong mineral acids. I am most disposed towards the employment of potassa fusa, and seldom select any other caustic, as I have found it, when judiciously employed, in every way the most satisfactory. One or two applications usually suffice; and, if care be taken, the new tissue which results will bear a very close resemblance to healthy skin, although to the accustomed eye it will always, or generally so, be found to differ. It usually possesses a more shining and glistening hue, and presents a stretched appearance. Wandering over its surface will be detected irregular, tortuous, red, linear vessels; and here and there, especially if the tendency to scrofulous action be prominently marked, a proneness to ulceration. Although the patient may be well pleased to recover from a severe attack of glandular tuberculosis with no further disfigurement than one or more patches of new tissue, which, if not absolutely similar, bear a close resemblance to the normal cutaneous surface, still the surgeon is bound to use every endeavour to forward the most advantageous form of cicatrisation and reparation.

It is only of late years that a correct acquaintance with the nature and nutrition of scars and cicatrices has sufficiently impressed practitioners with the importance of regulating and avoiding their unnecessary formation. There is no doubt whatever that the growth of cicatrices is accomplished by assimilative processes identical with those which lead to the development and increase of healthy tissues. Consequently, it is expedient that all available means should be used to keep them as limited as possible; for although, in the early years of childhood, a scar resulting from tuberculous destruction of a lymphatic gland may be nearly imperceptible, still, at a more advanced period of life, it will be found to have relatively increased with the other tissues of the body; or, to use the words of Mr. Paget, "the scar of the child, when once completely formed, commonly grows as the body does, at the same rate and according to the same general rule; so that a scar which the child might have said was as long as his own forefinger, will still be as long as his forefinger when he grows to be a man."* (*Op. cit.*, vol. i, p. 49.)

Bearing these facts in mind, I make it a point never to resort to the use of caustics for the destruction of scars and cicatrices, unless I can be tolerably certain that improvement of an appreciable kind will result. In general, the pure caustic potassa, in stick, although immediate and sometimes severe in its effects, will be found the most advantageous form; for, with care, the diseased tissues can with nicety be destroyed without in any way endangering those of a more healthy nature. When the cicatrices are numerous, and situated, as they usually are, on the neck, it is generally more convenient to destroy them by degrees; for, in this way, the surgeon will be better able to accomplish what always proves to be a delicate, and, indeed, sometimes no very satisfactory task. After the formation of an eschar, soothing applications will be found most grateful. In the course of a day or two, the destroyed portions will separate, and leave a healthy surface. If this surface be on a level with the surrounding skin, it will be easy to induce cicatrisation and a permanent improved condition. Should one application of the caustic prove insufficient, it may be repeated, but not without giving some slight pain. The practitioner will, however, probably encounter but little difficulty in the judicious destruction of such scars and cicatrices, which cause an amount of disfigurement unpleasant to the sufferer, and by no means creditable to surgery, provided due attention be paid to certain requirements which have been noticed in these pages.

d. The Knife. When the cicatrices which result from the healing of suppurative lymphatic glands are very extensive, and cause serious disfigurement, they may oftentimes be removed, or considerably lessened, by a judicious and skilful recourse to the knife. The peculiar puckered condition which these cicatrices assume has already been alluded to; but it remains to be noticed how position and various circumstances influence their formation. A cicatrix following destruction of one or more of the superficial cervical glands situated in the middle of the neck, assumes a permanent puckered and dimpled appearance, by reason of the skin being glued to the deeper structures; for it will frequently be found impossible to elevate the integument so implicated from the parts placed immediately beneath. When lymphatic glands situated near to bone are destroyed, and where there is a paucity of soft covering materials, the cicatrices resulting will be likewise found adherent, not only to the cellular sub-structure, but to the bone itself. It is most usual to observe this condition at the base and angle of the lower jaw, beneath the eye, on the forehead, and over the clavicle.

When cicatrices of this character disfigure these various parts, they may be treated by the knife in one or other of the following ways.

If the cicatrix be healthy, and its unsightliness be mainly dependent on its puckered and dimpled appearance which results from its adhesion with deeper tissues, it will oftentimes suffice to sever the bond of adhesion, and prevent, during the healing of the wound which has been made, a re-union of the divided parts.

An operation of this nature is slight, free from any great amount of pain, and oftentimes productive of much benefit.

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* My friend and colleague, Mr. W. Adams, has lately called attention to the importance of regulating the formation of scars, etc., in some interesting remarks on the growths of cicatrices proceeding *pari passu* with the rest of the body. (*Pathological Transactions*, 1860.)

The details of the following case illustrate how such a proceeding may be accomplished. A girl, aged 15, who had suffered for many years from various forms of scrofulous disease, experienced considerable inconvenience from an unsightly cicatrix, situated on the upper part of the right cheek, over the junction of the malar with the superior maxillary bone. The principal deformity arose from its firm adhesion to the bone. The tissue forming the cicatrix was very thin, and there appeared to be little, if any, interposed structure between it and the bone, while the patient had a fat chubby face, so that the deep depression which thus resulted was rendered the more disfiguring. A thin bladed narrow knife (a tenotomy knife) was inserted at the distance of about a quarter of an inch from the outer margin of the cicatrix, and passed obliquely down to the point of adhesion, which was then freely divided, care being taken to keep the point of the knife close to the bone. When division had been satisfactorily accomplished, the opposing raw surfaces were separated by drawing the cicatrix away from its old position, and retaining it in its new one by means of sticking plaster. In this way, the two surfaces were allowed to heal without the possibility of their again becoming united. In four days time, the cicatrix was allowed to slip back into its former locality, when it was found that considerable improvement had resulted, although it was impossible, as it is in all similar cases, for the deformity to be quite removed, on account of the loss of cellular tissue, fat, etc., which had taken place.

I have resorted to a similar operation when the cicatrix has been situated beneath the margin of the lower jaw, and with even better results. The proceeding is, however, still more satisfactory when the band of adhesion is connected with soft parts only, as where the cicatrix is situated in the neck beside the sterno-mastoid muscle. When the cicatrices are more complicated, it is often expedient to resort to a somewhat more extensive use of the knife, and entirely remove the disfigured integuments. This may often be accomplished to the credit of the surgeon and satisfaction of the patient.

The operation consists in entirely removing the cicatrix, and uniting the lips of the wound in such a way that a mere linear scar results. The advantage of such an operation is at once evident, especially if the deformity to be removed be the only one situated in a part of the body usually exposed to observation.

I may quote the following case as illustrating the advantages to be derived from such a method of treatment. A young lady consulted me, in the autumn of 1859, on account of an ugly scar, about two and a half inches in length, situated on the right shoulder, in such a position that she was unable to wear a low dress. Under the influence of chloroform, it was removed, great care being taken perfectly to adjust the margins of healthy integument, so that a mere linear seam should result. This was accomplished by means of delicate wire sutures; admirable union ensued, and, in a week, she left London, well satisfied with the result obtained.

I could quote many instances in which a judicious application of the knife was followed with decided advantages, but the above case is sufficient to prove the fact.

For the adjustment of the lips of the wound, I am in the habit of using a fine metallic pin, with the figure-of-8 suture, such as is employed by continental surgeons, in preference to the sewing needle armed with either silk or wire.

It occasionally happens that the cicatrix resulting from suppuration of lymphatic glands is so extensive that neither of the above operations will prove of any service. It then becomes advisable to remove the cicatrix and transplant a portion of adjacent healthy skin—in fact, a true Tagliacotian operation is needed. It is fortunate, however, that such a severe measure is seldom required; although I have resorted to it in instances in which the lower eyelid has been extensively disfigured, and serious conjunctivitis, and other affections of the eye, have resulted from inability to close the eyelids.

When mere bridles of integument cause additional disfigurement to a cicatrix resulting from destruction of a gland, they may be removed by means of the scissors or knife, without causing any special pain or annoyance. Situated on the anterior surface of the arm are one or more lymphatic glands, which sometimes become greatly enlarged and suppurate. The destructive action not unfrequently involves the flexor muscles and tendons, and the consequence is, that a serious amount of contraction of the fingers ensues.

I have very lately seen, in the practice of my friend Mr. Fergusson, a case illustrating these various features. The patient, a young lady, had suffered from scrofulous suppuration of one or more of the lymphatic glands in front of the arm. Two or three of the fingers were considerably flexed, and could not be extended, by reason of the contraction which had ensued in the muscle supplying the tendon—superficial flexor of the fingers. Division of the contracted tendons was resorted to, and the patient regained an excellent use of the fingers.

Such is a brief notice of the advantages which may often be afforded by the surgeon in cases of disfigurement and deformity arising from tuberculous and simple destruction of the lymphatic glands; but while I have endeavoured to point them out more forcibly than, perhaps, other authors on scrofulous diseases have done, yet I cannot too urgently insist on the importance of due attention being paid, both by the patient and the practitioner, to the various destructive and reparative processes which ensue when the external lymphatic system is invaded with tubercle; believing that, in the treatment of this disease and its results, prevention is, on all occasions, better than cure.

POISONING BY ACONITUM NAPELLUS.

SYMPTOMS OF POISONING FROM A MINIMUM DOSE OF FLEMING'S TINCTURE OF ACONITE.

By Thomas Skinner, M.D., Obstetric Physician to the Liverpool Dispensaries.

Having perused, both with pleasure and with profit, Mr. Duckworth's excellent "Observations on the Physiological Action of Aconitina", in a late number of the Journal, and being aware that medical literature is not overburdened with correctly observed cases of poisoning by aconite, I beg to offer the following particulars of a case of the kind, with a few remarks.

In the summer of 1850, when a student of medicine of the second year, and ruralising in the fishing town of Musselburgh, near Edinburgh, I was asked to prescribe for a strong and healthy woman, about thirty years of age, who had long been a martyr to chronic and subacute rheumatism. She showed me prescriptions she had had dispensed at various dispensaries and apothecaries' shops; and, so far as I knew at the time, aconite was one of the few remedies she had not tried.

As I was anxious to initiate myself in the art of pharmacy, I determined to some extent to be my own druggist. I procured from Messrs. Duncan and Flockhart of Edinburgh some of Fleming's tincture of aconite, as also some guaiacum and sassafras woods and bruised liquorice-root. With these and some raisins, I made the following mixture:—

℞ Tr. aconiti ʒss; decocti guaiaci (E.P.) ℥xv,—

of which the patient was to take one tablespoonful every eight hours, and an extempore vapour bath every night before going to bed. This treatment was continued for three days, when the catamenia appeared, and it was stopped. The only unusual sensations then experienced by the patient were numbness and tingling of the tongue, of the palms of the hands, of the tips of the fingers, and of the soles of the feet.

Three days after the cessation of menstruation, she resumed the mixture without the baths; and, as the degree of physiological action previously developed was slight and the rheumatism remained unrelieved, I increased the dose of the mixture to two tablespoonfuls instead of one three times a day, which is equal to two minims of Fleming's tincture every eight hours.

On going to bed, she took one dose of the mixture, which made her vomit soon after it was swallowed. She again experienced the numbness and tingling as above stated. About eight o'clock in the morning, she took the next dose, which was also followed by sickness and vomiting, and which latter symptoms lasted until I saw her about 11 A.M. The following was her condition:—Countenance pale and exsanguine; pupils widely dilated. The muscular system was so weak and relaxed that she could barely stand or walk; the pulse and the heart's action were very slow and faint; respiration laboured; and she felt deadly sick at the stomach, with occasional attempts at dry retching. She complained very much of loud noises in her ears, which were likened to "hundreds of omnibuses rolling swiftly past her on every side". She felt excessively faint, and frequently said that she thought she was sinking. She had also an uncontrollable desire to lie down and sleep. The tingling and numbness were present, but they were not so much complained of as the more alarming symptoms I have just narrated.

I immediately despatched a messenger for my friend Dr. Sanderson of Musselburgh, and at once administered a smart emetic of mustard and capsicum, with some strong water of ammonia in it. When I saw that the stomach was thoroughly emptied with the emetic and abundance of warm water, I gave her, in divided doses, two wineglassfuls of rum in strong bitter coffee. In about an hour, there was not a single symptom of poisoning left; but she felt very weak during the remainder of the day.

Our associate Dr. Alexander Sanderson very kindly came to my assistance, but he was too late to witness any of the poisonous symptoms.

Remarks. As there may be some reasonable doubts raised about this case, I will endeavour to dissipate them at once.—1. As to the purity of the drugs. The name of Messrs. Duncan and Flockhart, who supplied me, leaves further comment unnecessary. 2. There might have been too much of the tincture put into the mixture. To check this source of error, I measured the remaining contents of the half-ounce phial given me by the druggists: it contained three and a half drachms. 3. The patient might have taken too much at a time. Not so; because I found about eight fluidounces and a half of the mixture left of the fifteen ounces which were originally in the bottle given to the patient. 4, and lastly. May not the tincture have floated to the top and been swallowed in the first dose, particularly after standing a few days? I believe not. The history of the symptoms will not support this explanation; besides, the patient was cautioned to shake the phial before taking a dose, and the same caution was inscribed upon the label on the bottle. For a still stronger reason I do not believe this to have happened. I have been informed by my friend Professor Fleming himself, that his tincture of aconite is perfectly miscible without subsequent separation in such a mixture as the one here alluded to.

I may be in error, but I am nevertheless quite convinced in my own mind, that the symptoms in this case (possibly idiosyncratic) were arising from the ingestion of not more than four, or, what is much more likely, of only two minims of Fleming's tincture of aconite. I may state that I have seen similar susceptibility to the poisonous influence of belladonna. I have seen dryness of the fauces, delirium, dilatation of the pupil, double vision and almost total blindness, from *one eighth of a grain of the extract* in the form of pill with sulphate of zinc. I have also seen half a grain of the same extract in the form of a rectal suppository produce a somewhat similar effect. Both of these cases were in ladies who were extremely sensitive to every form of narcotic, and who were possessed of highly developed nervous temperaments. It was not so, but the very reverse, with the patient particularly alluded to in this paper. I may here remark, that my patient was not the subject of any ascertainable organic disease of the heart, and that I do not believe the symptoms were in any way associated with hysteria. I beg also to state that the patient was not previously informed of the symptoms or of the dangerous nature of aconite. I am sorry to add that the rheumatism was no way influenced for better or for worse.

In conclusion, there seems to be some strange and unaccountable difference among observers about the condition of the pupil in poisoning by aconitum napellus and its active principle. Mr. Duckworth concludes as the result of his observations with the alkaloid on the constitutions of rabbits and cats, that, "*as a rule, the pupil is more or less contracted, dilating enormously a few moments before and at the time of death.*" Now, although I believe Mr. Duckworth to be perfectly right as regards the animals he experimented upon, I doubt if it can be proved that the observation extends to man. I cannot say how near my patient was to death, or how distant: all I can say is, that I have no wish to see another in similar circumstances. Whether she was *in articulo* or not, when I first saw her the pupils were enlarged, dark and bright; and when she was well and in health, I know that they were not so. In Dr. Nevins's case, quoted by Mr. Duckworth, a young lady, an hour after taking a fluid-drachm of the officinal tincture of aconite, had her pupils "so dilated that no iris could be seen, and this condition lasted till the following day." (Journal, 1861, p. 225.) In the extraordinary case of poisoning by *two and a half grains of aconitina*, which occurred in the practice of the late Dr. Golding Bird, the pupils acted to the influence of light. (*Lancet*, January 1st, 1848, and *Medical Gazette*, January 6th, 1848.)

Medical Degrees in Australia. During the past year Melbourne University has been placed on a par with the British Universities—its degrees taking equal rank with time-honoured Oxford and Cambridge; but as yet, no steps have been taken to establish a Medical School. A young man may now fit himself to become a clergyman or a barrister without leaving the colony, and it has lately been intimated that a School of Engineering was being formed; but a medical student must needs go to Europe, spend three or four years there, and if he return to practise here, has then to set to work to become practically acquainted with the peculiarities of disease in the colony, all which he might have had under his observation during his pupilage if he had been professionally educated on the spot. (*Australian Medical Journal.*)

Onychomycosis. Professor Virchow exhibited to the Berlin Medical Society a specimen of a nail affected with what he terms *onychomycosis.* It consists of a vegetable parasite, first described as affecting the finger-nail by Meissner, and frequently observed by Virchow in the nail of the great toe, at Würzburg. It occurs far less frequently in Berlin. The preparation exhibits the characteristic white appearance of the surface of the nail, due to the presence of a fungus situated deeply at the bottom of the nail. It resembles *Porrigo Favosa*, but is not identical with it, porrigo of the nail being less deeply placed than onychomycosis. (*Deutsche Klinik*, No. 38.)

Reviews and Notices.

A Treatise on Diseases of the Joints. By Richard Barwell, F.R.C.S., Assistant-Surgeon, Charing Cross Hospital. Illustrated by engravings on wood, etc. Pp. 469. London: 1861.

"There is no way to success in our art," as a famous painter once said, "but to take off your coat, grind paint, and work like a digger on the railroad all day and every day." There is no way to success in *our* art, but by constant toil and mental discipline. Having accustomed himself to work, a man may achieve anything on which he is firmly resolved. Concentration is the secret of success in every undertaking in life. It is the most powerful plea that the specialist can urge in his favour. "Stick to one business," said Rothschild to Buxton; "stick to your brewery, and you will be the great brewer of London. Be brewer, and banker, and merchant, and manufacturer, and you will soon be in the *Gazette*."

We do not claim for Mr. Barwell that he is a specialist; and, indeed, in these times, we should not claim this position for anyone who had not indubitably earned it for himself; but we observe that he has so prudently concentrated his powers—having, as he tells us in his preface, devoted himself during the last six or seven years, almost unremittingly, to the study of joint-diseases—that he has been enabled to write with much ability on the subject of which he treats. Mr. Barwell has given us a handsome volume, with good type, well-executed woodcuts, and, above all, with good reading. He has worked his subject well, and he has not forgotten to make due mention both of his predecessors and his contemporaries who have helped to elucidate various points of his subject.

This work is divided into two parts, which together contain eighteen chapters. The first chapter is devoted to the Physiological Anatomy of the Joints. In some particulars, Mr. Barwell's views differ from those of previous writers, as Toynbee, Tomes, and De Morgan, but especially with regard to the construction of the articular lamella. These views were stated and discussed before the Pathological Society during the last session, and they are, probably, in consequence, known to many of our readers. The following is Mr. Barwell's description:—

> "This articular lamella, in reality, consists of a series of very minute parallel tubes, which run in a wavy course from the bony to the cartilaginous surface. Among these, but having no special, if any, communication with them, are the bodies mentioned by Kölliker as undeveloped bone-cells. . . . . . Thus," continues our author, "the articular lamella is not an impervious material. . . . . The channels, running from the deep or osseous to the superficial or cartilaginous surface of the lamella, permit the passage of nutrient fluid from the bone to the deep surface of the cartilage. This is the one important point—it is immaterial what the channels through which that fluid passes be called, whether tubes, osseous intervals, or any other name, as long as it be fully understood that there is a mechanism permitting fluid to permeate the structure, and to nourish the cartilage from its deep surface."

Mr. Barwell admits that these "tubes" are not lined by a tubular membrane. The question is, is the articular lamella traversed by a system of tubules? It is highly probable, as has been stated by Mr. Hulke, that "the lamella is permeable by fluids, and that the articular cartilage is in great part nourished by osmose across it." It remains, however, to be proved that channels or tubes exist, through which fluid passes to nourish the articular cartilage. With the best desire to see, we have not been able to see anything resembling fig. iv, p. 10, which professes to be the representation of a section of the articular lamella parallel to the surface.

The following seven chapters are devoted to Affections of the Synovial Membrane. Acute synovitis is naturally first treated of. Mr. Barwell does not agree with those who think that "dryness" of the synovial membrane is the first effect of inflammation, but he says:—

> "The first effect of the inflammatory irritation is congestion of the subsynovial tissue, accompanied by rapid secretion of serous or thin synovial fluid into the joint."

M. Richet holds the same opinion, and asserts that, although the membrane may lose its polish, it is never drier than in its normal condition.

> "Very soon after the increase of effusion has commenced," continues our author, "the membrane becomes puffy and swollen, the epithelial layer falls off, leaves a bare surface, the effusion becomes more fibrinous, and often, at the same time, opalescent in character. . . . . . The effusion, by an inflamed surface, of a fluid capable of spontaneous coagulation is undoubted; some of this liquid coagulates on the spot whence it is poured forth, some of it is dissolved in the ordinary secretion of the membrane. The fluid is organisable lymph, and it is, if not actually eliminated by the white corpuscles of the blood, at least so influenced by them, that it contains germs of similar elements."

The author has done himself injustice by the last sentence. We draw his attention to it; but we think it unnecessary to discuss it.

Referring to the "partiality" of certain forms of inflammation of the knee joint, Mr. Barwell observes:—

> "It is very difficult to give any good reason for the extreme partiality which acute synovitis shows for certain joints. If it arise from cold, there seems some ground for saying that a superficial joint, like the knee, would be chiefly attacked; but why should pyæmia, when only one articulation is the seat of its peculiar synovitis, nearly always attack the knee? Gonorrhœal rheumatism often attacks no other joint, and never, as far as my researches have gone, leaves the knee unaffected; and I do not know any case of polyarticular rheumatism in which the knee has escaped, though we find many recorded in which other joints have remained free."

It is doubtless the fact that the knee is singularly prone to inflammation. It is the largest joint in the body, having the most extended complicated synovial membrane, and it is acted on by very powerful muscles. Further, this joint is most superficial, not being covered with masses of muscle, as are other large joints, such as the hip and the shoulder; and on it is supported the weight of the trunk. These may be assigned as reasons why the knee should be peculiarly liable to suffer from inflammation. In gonorrhœal rheumatism, it rarely escapes; yet we have seen instances in which other articulations have become affected, and have even become ankylosed, as the jaw, the hip, the finger, and the shoulder, where the knee has not been inflamed. The knee is, however, very prone to take on inflammatory action, and, as we believe, for the reasons already assigned.

The question of treatment is fully and ably considered. "Rest is," as Mr. Barwell very truly says, "the first and most important part of the local treatment." It is, indeed, so important that, *complete rest* being obtained, local applications, such as blisters, issues, moxas, the actual cautery, etc., may be, in great measure, dispensed with. Rest, in the strictest sense of the term, however, can only be obtained by the application of bandages and splints; without these appliances, voluntary and involuntary actions of the muscles which govern the limb cannot be prevented.

The success of the Scotts—father and son—in affections of the joints was due essentially to this mode of treatment—maintaining the limb immovably fixed. Our author, however, thinks that the application of the actual cautery, "the white-hot iron," is, in certain cases, most advantageous.

> "Thus," he says, "the stage of strumous synovitis to which it is more particularly adapted is that in which the first symptoms of inflammation have somewhat subsided, but in which enlargement is still going on." (P. 140.)

For the mode in which the cautery is to be applied, we must refer our readers to the book itself.

The second part of the volume contains accounts of the "Diseases commencing in the Bone." Chapter xiv is devoted to "Hip-joint Disease;" to which we desire especially to refer our readers; and the concluding chapters, xvii and xviii, treat of "The Restoration of Mobility and Conformity to Crippled Joints," and "On the Removal of Diseased Joints," to some remarks on which we shall assign the space that yet remains to us.

> "In the large majority of inflammatory diseases which we have examined," says Mr. Barwell, "the natural tendency is to obliterate the joint by a growth of granulations, *both inside and outside its cavity.* When those in the former situation organise further and form fibrous tissue, false anchylosis is produced; when the structure becomes ossified, the anchylosis is called true. . . . Inflammation having yielded, the process of consolidation very gradually sets in. Thus, the state of anchylosis is bound by no very distinct line. . . . . . Inflammatory action having ceased, the consolidating granulations gradually cause contracture with or without actual obliteration of the joint. . . . . Even when a great deal of granulation has been produced, we may by the use of shampooing, passive motion, and other judicious means, secure the reabsorption of a large part of these formations. Whether the fibrating part be much or little, whether it be situated partly inside or almost entirely outside the joint, it is most decidedly our duty to prevent its contracture into such form and shape as to produce distortion. . . . . . Unfortunately, there has been engendered in the surgical mind a great dread of allowing any movement in a strumous joint, whether any inflammation remain or no, until the cavity is obliterated. The attendant, indeed, as soon as a scrofulous joint-disease has been diagnosed only looks forward to that which is called (by courtesy) a cure by anchylosis."

Such are Mr. Barwell's views, and such is the tenor of this chapter on the Restoration of Mobility, etc. We entirely agree with our author in his views, and we recommend this chapter to the especial notice of the reader.

During the last few years, the treatment of affections of the joints has undergone considerable modifications. Mr. Barwell need not have limited his remarks to strumous affections; for the same observations will apply to other forms of inflammation. We have a vivid recollection of the discussion which followed the reading of Mr. Brodhurst's paper on this subject at the Royal Medical and Chirurgical Society, in March 1857, when fear was expressed by some "most respectable authorities," that the treatment proposed was too violent, and that it was wiser to let a stiff joint alone. Few, however, will now be found to dissent from the views which are so well expressed by our author.

This question of the restoration of mobility is one of considerable interest at the present time. Mr. Barwell gives the following historical sketch:—

> "Stromeyer only used the slow method of reducing deformity by means of apparatus which should, after division of tendons, exercise a comparatively slight, but lasting, traction on the limb. Dieffenbach, to whom this method appeared objectionably long, proposed and carried out sudden and forcible rupture, or stretching of parts, without division by the blade. Langenbeck of Berlin has carried on, and, indeed, has become the chief advocate of this system. He asserts that a contractured muscle does not, when the action of the will is suspended by chloroform, become lacerated during violent extension; the assertion, however, is not borne out by facts."

The objections to each of these methods of treatment are well stated by Mr. Barwell, thus:—

> "When a joint is anchylosed (falsely), and the tissues are pretty solid and firm, the method of Stromeyer, by gradual extension, is not only long and tedious, but it often fails to effect the object. It is only to be trusted in recent cases, wherein the tissues are still weak and flexible. The method of Dieffenbach and Langenbeck exposes the parts to unnecessary violence; if the muscles and fasciæ be much contractured and strong, these structures may be torn; a nerve, or even an artery, may be lacerated; owing to such injuries inflicted upon the parts, mobility cannot be so perfectly restored as when contractures being divided, less violence is necessary. The muscles of children, which can be readily overcome by very slight force, retract again, and are apt to produce secondary deformity, or to limit motion very considerably. Any old scars of the skin are exposed to danger of rupture, and when this happens, suppurative inflammation is violent and dangerous. Fourthly, the bones may be broken or the epiphyses separated.
>
> "A combination of the two methods certainly offers the best advantage in all cases where contracture outside the capsule is considerable, and the position requires much change. Langenbeck urged against this method, that the wounds made by the tenotome will gape during the extension, and air be sucked in, besides which they form points of departure whence cutaneous rupture may begin. This is certainly true," adds our author, "and it was once my misfortune to be present at an operation for extending the knee, where both hamstrings having been divided, the skin, during the extending process, split from side to side.
>
> "It was Mr. Brodhurst who first suggested the wise course of performing all subcutaneous divisions of fasciæ and tendons some days before extension is to be used, and of not resorting to this latter part of the treatment until the wounds produced have become thoroughly and soundly healed."

When this mode of operating is adopted, and other necessary measures are taken to avoid undue violence to the soft structures, there is no operation in surgery more successful or better adapted to its purposes than this to which we now refer.

In his last chapter, "On the Removal of Diseased Joints," Mr. Barwell contrasts amputations with resections, and records his preference for the latter operation. He gives us some valuable statistics. Thus, of 104 cases of removal of the head of the femur, 12 cases were of fracture and gunshot injury; and of these only one recovered. But of 92 cases of joint-disease, 56 recovered, 32 died, and in 4 the result was unknown. Of the knee, 181 cases are mentioned, and of these 39 died, and 122 recovered, while 20 got well after amputation: *i.e.* 21.54 per cent. die, 11.05 per cent. require amputation (whereof 9.5 per cent. die), 67.4 per cent. recover with more or less useful limbs.

We cannot conclude this imperfect notice without congratulating the author on the completion of his task. The volume must prove to be eminently useful, and it will be an important addition to every medical library.

British Medical Journal.

SATURDAY, APRIL 6th, 1861.

ALCOHOL: ITS ACTION AND USES.

Our belief in the therapeutic value of alcohol rests on no mere speculative notions, but is supported by the testimony, the observation, and the experience of almost all practitioners of medicine. At the same time, we must confess that, as with many other remedies which we use, our knowledge of its mode of action is very imperfect, and we greatly stand in need of correct principles as to its administration. Its general applicability to various conditions of the system, as a potent health-restorer, has been almost universally recognised, and in all ages physicians have resorted to its use. It is only, however, of late years that it has risen to the position of one of the most important and most freely used of our materia medica, and that its employment has been sanctioned, and its value demonstrated, in numerous diseases to which it was previously considered altogether inapplicable. Both in medical and in surgical practice, there can be no doubt that for some years past a larger quantity of alcoholic fluids has been used than during any other equal period in the previous history of medicine in this country. The statistics of our hospitals would prove this. As to the influence the practice has had on the rate of mortality in our various public institutions, we cannot now stop to inquire. We want statistics on this point; and such statistics, if properly drawn up and made to show the relative rates of mortality, etc., during two given periods—one before, the other during, the present system of treatment—would possess features of great interest and importance.

The example and the teaching of a late distinguished physician, have no doubt done much to produce the result we now witness; but, although he probably carried the stimulating treatment beyond the limits which other men observed, his practice presented no novelty, except in degree. We shall have subsequently to consider briefly some of his theories of the action of alcohol, and see how far they will stand the test of direct observation and scientific research, and whether they may be relied on as safe guides for practice.

We would at once, in considering the therapeutic value of alcohol, express our opinion that the question does not rest on the supposed use of the agent as an article of diet, nor on any supposed chemical change it may undergo. It would be satisfactory to know—and the establishment of such fact would increase the value of alcohol—that, after performing its therapeutic action, it was used up in the system either as a heat- or fat-producer, or as affording nourishment to the nervous system; but its value as a medicinal material rests not on this assumption, and may be altogether independent of any such assumed action. We may grant all that the chemists advance of the non-oxidisable nature of the substance, and that every particle is eliminated from the system unchanged; but we do not thereby impugn its therapeutic value, nor is our confidence shaken in its applicability to various conditions of the body, when taken as an article of habitual use.

The influence which alcohol exercises on the circulating system is probably one of its most important actions in a therapeutic point of view; but we cannot account for all the effects it produces in this direction, solely on the ground that it acts as a stimulant to the central organ. That alcohol increases the power of the heart, and, when administered in cases where there is debility with a feeble and rapid pulse, diminishes the frequency of its beat, is a fact familiar to all; and amongst the most important indications we have for the administration or non-administration of the remedy, is the character of the pulse, as shewing the condition of the heart and the tension of the arterial system. Some physiologists have found (see the researches of Volkmann and others) that the introduction of certain substances into the blood has a tendency to increase the rapidity of the circulation, whilst the introduction of others has a directly opposite effect. Amongst the latter is alcohol; and, according to the observations that have been made, whether this substance be injected into the vessels of a living animal, into those of a dead one in which a circulation is kept up, or, again, into a set of vessels where an artificial circulation is being carried on, there is a retardation of the circulating current, apparently from some physical influence which the alcohol produces, either on the blood itself, or on the coats of the vessels, or on both.

We well know the sense of fulness and heat of skin which follow a small dose of alcohol, and the congestion which ensues when the dose is increased. In the latter instance, we have evidence that the blood is circulating less rapidly than when the vessels are free from alcohol, and the sense of fulness and heat under the smaller dose may be due to the same circumstance. Such a state of capillaries would necessarily result in increased tension of the arterial system and a fulness of the pulse; the more especially, when taken in connection with the effects produced on the heart itself by the local action of the alcohol. It is impossible in an article of this kind to pursue the question we have here started, as to the way in which alcohol modifies the circulation and controls the action of the heart; but the subject is one which requires careful consideration: it is not sufficient in speaking of the action of alcohol either on the nervous or the vascular system to say that it excites the spirits and stimulates the heart. There are points beyond these which, we believe, will yield to earnest investigation, and principles of action of the remedy which may be established, such as will give safer guides for its administration than we as yet possess.

If the theory, with regard to the non-oxidation of alcohol in the system, be true in its entirety—as it undoubtedly is in part—the view of its value, on the supposition that it maintains the calorifacient process, and affords nutriment to the nervous tissue, at once falls to the ground. This latter view was the one entertained by Dr. Todd; but we are disposed to think that he has not satisfactorily established it, and, as we have already said, that the claims of alcohol to our confidence as a therapeutic agent, rest on other grounds than its supposed capability of undergoing chemical change in the body, or of being converted into tissue.

Independently of the more immediate effects which result from the imbibition of alcohol, there has been attributed to it a very important action; namely, that of checking the metamorphosis of tissue, diminishing the consumption of fat, and increasing the assimilative powers of the system. Dr. Hammond performed a series of experiments on himself, from which he came to the conclusions abovenamed. (*American Journal of the Medical Sciences*, Oct. 1856.)

These experiments were well-conducted, but were not, we think, extended over a period sufficiently long, nor did they produce results sufficiently definite, to render them decisive on the points at issue; the more especially as they have been, in some respects, invalidated by subsequent researches. Dr. Hammond thought he observed a diminution in the carbonic acid excreted from the lungs after taking alcohol; and he, therefore, concluded that there was a smaller consumption of fat; but Dr. E. Smith's experiments have shown, as was stated in our former article, that alcohol does not diminish the amount of carbonic acid excreted, but actually increases it. With regard to the influence of alcohol in checking the metamorphosis of tissue, and thus diminishing the amount of urea which is got rid of, although we are not in possession of any facts which appear to us satisfactorily to establish the point, yet, from the effects which we see produced under certain conditions of disease, we think it highly probable that alcohol may possess some such power; this, however, is, perhaps, only what may be said of many other substances—in fact, of almost all those which come under the head of general tonics. A well conducted series of observations on this particular question is much to be desired.

In connection with the subject alluded to above—namely, the tendency of alcohol to diminish the consumption of fat, and thus to increase its amount in the body—we have a very important pathological fact related by Messrs. Lallemand, Perrin, and Duroy. They have found that, in animals which have been poisoned by alcohol, the blood contains a large number of fat-globules visible to the naked eye. A consideration of this circumstance may probably serve to explain, in some measure, the frequency of the various degenerations which are so constantly observed amongst those who habitually take large quantities of alcoholic fluids.

There is another point in the pathological effects of alcohol to which it is important that our attention should be directed; the more so, as the effects to which we allude have been denied. Dr. Todd, in his observations on the therapeutic use of alcohol, says: "Of the various unfavourable effects which alcohol is capable of producing, it behoves the practitioner to observe that inflammation of internal organs is not one." In proof of this assertion, Dr. Todd appeals to the case of a child who was poisoned by alcohol, and in whose body no appearance of inflammation could be found. In the work to which we have already frequently alluded, that of Messrs. Lallemand, Perrin, and Duroy, the observations of various authors on this point are recorded, and instances are given in which, when death had taken place more or less rapidly from the imbibition of alcohol, not only was there congestion of the brain, liver, and other organs, but in some cases, well marked inflammation of the bronchial tubes, lung-substance, etc. Pulmonary apoplexy and meningeal hæmorrhage were also observed; and we have ourselves seen an instance of the last kind of accident as a sequel of alcoholic poisoning. We are by no means of opinion that these facts contraindicate the use of alcohol, even in certain inflammatory diseases; but we think they tend to show that, when taken in excess, it is not altogether inert as regards the production of inflammation, and that the latter must be considered as amongst the accidents which may ensue from its indiscriminate use.

From the influence which alcohol exercises in states of disease, we think indications may be gathered for its use in conditions of health. From the various circumstances of constitution, habits of life, etc., the moderate use of alcoholic beverages appears in many persons to be attended with great benefit. Those who argue against the proper use of alcohol from the ill-effects produced by its abuse, appear to us to miss the question entirely, and might as well, on like grounds, attack the use of tea and coffee. No doubt the highest development of physical strength can be obtained without the use of spirits, and the prize-fighter with his robust health, and splendid *physique*, is often adduced as an instance. Could we all live the life of the prize-fighter, breathe pure air, take unlimited exercise, and keep our digestive organs in such a state as to enable them to digest all the food the system requires, we might dispense with alcoholic fluids. Whilst, however men lead sedentary and laborious lives, working their nervous system, and breathing an atmosphere itself depressing; whilst the organs of digestion are scarcely equal to perform the work which is required of them in order to supply the waste of tissue which is going on; whilst, even naturally, the circulating system is languid, and the assimilative processes are weak, we apprehend that a substance like alcohol, dietetic, or medicinal, whatever we may call it, may be used in moderation, not only without disadvantage, but with decided benefit. In forming an opinion of the therapeutic value of alcohol, we must never lose sight of the fact that, as in the case with other remedies, pathological conditions may materially modify its physiological actions. In some affections we see that large quantities of spirits are borne without the usual effects on the sensorium being produced, and with the result of giving increased power and steadiness to the circulation, and of restoring the functions of the nervous system.

We here leave the consideration of our subject, to which we may, however, at some future time, return, as fresh facts may become known, or new theories be advanced. Having advocated the use of alcohol on the grounds of scientific observation and rational experience, both as an article of habitual use and in the treatment of disease, we would warn against the view which would look upon the substance as an universal panacea, as applicable to diseases of all kinds and in all forms, a view which would surely lead to erroneous practice, calculated to bring a valuable agent into unmerited disrepute.

THE WEEK.

Dr. Jonathan Wybrants of Shepton Mallet, from motives of pure humanity, has put himself to great trouble in order to save from further punishment a man who has, in his opinion, been unjustly convicted of abusing a girl under ten years of age. Judging from the facts detailed in Dr. Wybrants' pamphlet, we cannot doubt that the man would not have been convicted had he been able to employ counsel for his defence. This is just one of those cases in which the indignation excited at the nature of the accusation is apt to grievously prejudice the person accused; and we are satisfied that Dr. Wybrants has, at all events, made out a case strong enough to justify the Government in relieving the prisoner from further punishment. The pamphlet is, independently of the case specially dealt with in it, of interest, as it gives the opinion of a great number of the leading members of our profession as to the character and nature of the disease in young girls—discharge from the vagina and superficial ulceration of the labia—the cause of which has been often unjustly fastened on some unfortunate individual. The mother sees the discharge, accuses the child, threatens to punish her if she does not say who has been "taking her on his knee," etc., and often actually suggests the name of the man in whose company the child may have been; and thus the child is made to accuse a man of a crime of which he is perfectly innocent. It is grievous that there should be any members of our profession who are unaware of the nature of the complaint here referred to, and of the extreme caution requisite in dealing with it when made the subject of judicial inquiry.

A respected correspondent has written us a very clever letter, full of legal research, on the subject of the powers of the King and Queen's College of Physicians of Ireland; but we cannot see how any good is to result, or how any profitable conclusion to the question he opens can be arrived at, from its discussion in our pages. The College of Physicians alluded to, assert (as we understand the case) that they have the power by charter of granting degrees in medicine; and in this view of their privileges they are supported by their legal advisers. But when the College demands that their degree of doctorate shall be registered by the Medical Registrar, the Medical Council hesitate and request instruction from their counsel, and he advises that the Registrar cannot admit the title into the Medical Register. Hence, then, the question is at this moment, as we see the case, in the hands of the lawyers; and can only admit of satisfactory settlement in a court of law. The Dublin College, we must suppose, will apply for an injunction to compel Registrar to admit their claim. Under such circumstance, of what avail is it for us to attempt to ferret out the meaning of charters and acts of Parliament? This is a very different case from that of our Scotch friends of licensing notoriety. They know and admit that their licentiates have no pretence of a claim to the title which indicates the possession of a degree in medicine; and when appealed to on the subject, they distinctly say as much. But at the same time, they very carefully avoid doing that which the London College of Physicians has honourably done, viz., the making a law that none of their licentiates shall use the title of M.D. unless they possess it. By doing this open act of justice, the Edinburgh College knows very well, that it would have lost immensely in what it appears to be so fond of; it would, however, in general opinion, have gained inversely in what it appears to be very unconcerned for. Under the circumstances, therefore, it seems also, that the matter is not one which can be profitably twisted about in a medical journal.

Dr. Pantaleoni, so long and well known to English visitors to Rome and to the profession, has had the honour of being ordered to quit Rome, twenty-four hours' notice being given him for the purpose. We need hardly say, that the cause of this abominable act of cruelty on the part of the government (as it is called) is, that Dr. Pantaleoni is a liberal-minded man, who objects to the crushing tyranny which he sees daily practised on his countrymen; and that he is a friend of M. Cavour. We believe that no profession in Italy has offered more martyrs to princely despotism than our own—to its credit be it said. Let us hope, that the courage and devotion of these high-minded men to the cause of humanity will receive a due recompense. Dr. Pantaleoni goes to Turin; where his voice will probably be heard in the Chamber of Deputies, of which he has been elected a member.

An absurd story respecting the late eminent physician and pathologist, Dr. Matthew Baillie, having been extensively circulated, we willingly transfer from the *Athenæum* the subjoined contradiction of it:—

> "Sir,—I beg a small space in your columns, as one of the best channels of information in science and literature, regarding a statement in a recent publication, which would, with some, unjustly affect the character of a distinguished man. In this work, entitled *A Book about Doctors*, a story is told of a young Scotchman, named Matthew Baillie, afterwards high in his profession, who, being rejected in an examination by the authorities of the Royal College of Physicians, endeavoured to fight a duel with one of the censors, and was referred by him for this purpose to Sir Hans Sloane, at that time the President of the College. This account, of course, relates to my father, Dr. Matthew Baillie, the nephew of William and John Hunter, and the author of the important work on *Morbid Anatomy*; but it is totally incorrect. In regard to him, dates render the matter impossible; for he was born in 1761, and Sir Hans Sloane died in 1753. The story is, in all its parts, entirely without foundation at any period respecting the eminent physician in question, as the annals of College, carefully inspected, demonstrate. The rejection of an individual of some subsequent note, it seems, did take place under the presidency of Sir Hans Sloane, but all this had passed away before my father was born.
>
> "I remain, etc., W. H. Baillie.
>
> "March 14, 1861."

Regarding the above rather dramatic affair, but now shewn to be erroneous in his modern application, perhaps the mistake originated in an anecdote related by Mr. Wadd, of facetious memory, about an Irishman, who had been actually "plucked" at the College of Physicians, and did challenge an examiner. Mr. W., however, adds, the hero in that comical case was not the celebrated London physician.

We have more than once referred to the mode of reduction of strangulated inguinal hernia by *succussion*, as proposed and practised by Mr. Jessop of Cheltenham. We refer to it again, because we see another successful case reported by Mr. Power of the Westminster Hospital, and because we do not think it has yet received the general attention which it demands. A simple process like the one referred to, wholly without danger, and almost painless, which may relieve a man of the necessity of undergoing a frequently fatal operation, ought surely to be accepted as a great addition to surgery, even though it be not applicable to every case.

The question of the contagiousness of fever, has, unfortunately, been only too clearly demonstrated at the Southern Hospital of Liverpool. Here is the tale, which, we must confess, we cannot clearly understand; for it would appear from it, that none of this fever-breeding crew were themselves the subjects of fever. An Egyptian vessel arrives in the Mersey, with a crew of 300 men, filthy, crowded together, and ill-clothed—80 of them, including their native doctor, being on the sick-list. Six die from dysentery in Sandon Dock during the first week; and then thirty-two are sent to the Southern Hospital.

> "With regard to these, Dr. Cameron states: 'Of the thirty-two admitted three died from dysentery, one a few hours after admission; twenty-four were discharged; and five are still under treatment (one recovering from pneumonia, and four suffering from surgical diseases).' Dr. Cameron further states that 'the number of attendants who have taken fever is six—viz., two house surgeons, one acting house surgeon, two nurses, and one porter. The acting house surgeon and one of the nurses are dead.' Of the house surgeons one was residing in the house at the time of the outbreak; the other was staying in the neighbourhood on leave of absence, but visited his colleague repeatedly. The first is convalescent, the other doing well, though not out of danger. Several patients took fever. I have not hearp of any instance in which the disease has been propa-

> gated by those infected in the hospital. All the Egyptian sailors were, when admitted into hospital, swarming with vermin, and in an indescribable state of filth. During the four days, from 26th February to 1st March inclusive, upwards of 200 of the sailors bathed at the Paul Street baths. Although extremely filthy, all appeared to be in good health, with the exception of one or two. On the 2nd of March one of the male attendants at the bath was attacked with fever, and died, after thirteen days illness; and in the following week one of the female attendants and the keeper of the baths were also taken ill of fever, but both of these are now recovering from the attack. The facts, then, appear to be, that of the entire crew of 300 seamen, nine died of dysentery, and that although no fatal case of fever occurred among them, they communicated the disease to eleven individuals who were brought into immediate contact with them, of whom five died. So far as known, none of these eleven individuals have communicated the disease to others. The disease which has been communicated by those sailors is not, as has been supposed, a species of plague, but typhus fever—a disease which is never absent from large towns, but the mortality of which in Liverpool is at present below the average."

THE following is an extract from the last Report of the Hospital for Diseases of Children in Dublin. We copy it, because it confirms in an independent way the point which we have more than once brought under the notice of our readers; viz., the mortality which indirectly results from wet-nursing.

> "There is another very fertile source of infantile mortality, and one which has been specially dwelt upon from time to time in the reports of this institution; viz., the prevalent custom of giving children out to nurse, the mothers, their natural guardians, either having undertaken the nursing of children, or being employed as servants in the household of the rich. The consequences of such a system are daily becoming more obvious, children being brought back to this institution in a condition which precludes possibility of cure, reduced to emaciation, marasmus, and struma in all forms, from injudicious management; bread and milk and coarse improper food being substituted for their natural nourishment, of which they are so inhumanly deprived. And when pain or sleeplessness ensues, spirituous liquors or opiates are always at hand. This is no exaggerated statement, as those familiar with such cases will readily admit; and the appearance of children thus treated, once seen, is not easily obliterated. Their appetite ravenous, devouring greedily what is placed before them; yet such supplies fail to nourish the body, which daily becomes more emaciated, and at length they sink into the grave, victims of a neglect which was in great measure, if not wholly, preventible."

A WRITER in the *Taranaki Herald*, in noticing instances of individual daring in the engagement on the 28th of December, says:—

> "In a certain position Dr. Neill, of the 65th, was placed, and finding himself under pressing circumstances short of assistance, he rushed, accompanied by Corporal Mahan, with a stretcher, and succeeded in taking to the rear a wounded man. Dr. Neill received a bullet across his knee and one through the cap."

PROFESSOR FORGET of Strasbourg died on the 19th ult. from bronchitis. He had long suffered from emphysema and dilatation of the right side of the heart.—M. Dumas has communicated to the Academy the singular property of endosmose exhibited by two gases through mineral substances.—MM. Follin and Janssen, in order to facilitate the use of the ophthalmoscope, propose that the light should be passed through coloured glasses, so as to throw only blue rays into the eye, instead of red, yellow, or orange.—M. Pasteur affirms: that the fermentation of butter depends upon an infusorial animalcule, and that this animal lives without free oxygen. Two completely scientific novelties, we venture to say.—A learned *physicien* of the Côtes-du-Nord has discovered the cause of the last winter's great cold. It was the bombardment of Gaeta, producing immense condensation of watery vapour. The vacuum formed caused a rush of cold northern air to the south! To bring about warm weather for France, the Emperor should get up a cannonade in the Channel!—The best preparation for preserving steel: instruments is a mixture of one part of white wax dissolved by heat in two parts of benzine. The solution is applied cold with a brush to the steel, the benzine evaporates, and leaves a thin and uniform covering of wax. This covering is also elastic. —The Belgian government are introducing nickel into their coinage.—Italy, says *l'Union Médicale*, is now, as in the times of Cæsar (for whom its sky went into mourning) the classic land of prodigies. The augurs may still whet their wit, and look each other in the face without laughing, even though M. Cavour may be astonished, like old Cicero, at their coolness. Presages are not wanting; but the augurs have no college, and the Academy of Sciences has to register them. At the beginning of 1859, the sea raged and boiled up around the mole of Leghorn; and of this "horrific" *sign* M. Donati sent a description to M. Sainte-Claire Deville, who communicated it to the Academy. And now at Sienna, another Tuscan town, the rain falls of the colour of blood; and M. S. of Lucca sends a phial of it to the Academy.—*La France Médicale* introduces into its list of deaths for February 1861: "Oliver Goldsmith, author of the *Vicar of Wakefield*"!—A paper on the Therapeutic Action of Benzine on Animals has been read to the Imperial Society of Medicine of Lyons by M. Key, Professor at the Veterinary School. The principal result arrived at is the destruction of lumbrici and tænia.—"Last week," says *l'Union Médicale*, "at the *clinique* of M. Piorry might have been seen, not a Chinese mandarin, nor a Timbuctoo doctor, nor a doctor from the Rocky Mountains, but a Doctoress Professor of the Feminine Faculty of New York, with one of her pupils. Mrs. Dr. X. has crossed the Atlantic for the express purpose of seeing and hearing M. Piorry. Like honour has never been bestowed on a European professor. The Quaker, who visited Magendie at the Collège de France, came to scold him for his vivisections. Are Mrs. X. and her pupil goodlooking? I cannot say, for their faces were concealed by a thick veil. M. Piorry was very polite. The ladies admired much a fine case of Splenomacrosy; they examined carefully a remarkable Bronchosyphiosis, an interesting case of Enterocarciny, and a rare specimen of Angitromemphaxia. They appeared very familiar with this harmonious nomenclature of M. Piorry."—The French journals announce the death of Dr. Ferrus, at the age of 75, some months subsequent to an attack of apoplexy. This gentleman held an honourable and distinguished position in France. He received the cross of the Legion of Honour from the hands of Napoleon after the fatal Russian campaign, during which he suffered from slight congelation of the feet. He then became coadjutor of Pinel, Head-Physician of Bicêtre, and Inspector-General of Lunatic Asylums. His funeral was attended by various celebrities—Thiers, Mignet, Buchez, Bouillaud, Dubois, etc., etc. —M. Maisonneuve, says *le Moniteur des Sciences*, lately presented to the Institute a patient, who had the rare good luck of possessing three tibias, two in his legs, and one in his pocket. The last had been extirpated by the intrepid surgeon of La Pitié, by the means of one of those terrible operations, of which he appears to possess the monopoly, and which (as it would seem) are not always fatal.—M. Bérigny, Physician to the Versailles prison, says that a few nights ago a robber, who was disturbed in the act of depredation, endeavoured to get rid of the proceeds of his industry; and as he ran away swallowed sixty-five francs, viz., three twenty franc pieces, and one five franc piece. He admitted the fact when taken; oil was administered, and next morning he passed the coin without the slightest trouble.—M. Leudet has been elected Corresponding Member of the Academy of Medicine.—The following prizes are offered by the French Academy of Medicine: 5,000 *francs* for a work "on the History of Pellagra," in 1864. 5,000 *francs* "on the Application of Electricity to Therapeutics," in 1866. For "The Saving of Limbs by the Preservation of the Periosteum," 20,000 *francs*—half this sum being given by the Emperor. "The Spontaneous Generation" question, it is hoped, will be settled at last in 1862, the prize offered for its solution being a gold medal, value 2,500 *francs*. The next prize is too large for capture, viz., 100,000 *francs* for a "Cure for the Asiatic Cholera," or "For an Indication Positive of its Causes," or "For a Prophylaxis against it, as is Vaccine for Variola." The author of the prize, M. Bréant, happily remembered that probably no one in this generation would come up to his mark; and therefore decreed in his will that in the meantime 4,000 *francs* (interest) should be annually given to the best curer of skin diseases. Then, again, there are 2,000 *francs* representing the Barbier prize, for the best work on Chemistry, or Medical Botany.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

ASSOCIATION PRIZE.

The following propositions were carried at the last meeting of the Committee of Council of the British Medical Association:—

That a sum of twenty guineas from the Editorial Fund be set aside for the purchase of a Gold Medal, to be offered as a reward by the Association.

That the Secretary do at once advertise as follows:

That at the Annual Meeting of the British Medical Association, to be held in 1862, a Gold Medal of the Association, open for competition to all qualified medical men, will be awarded by the Association.

That the following be the terms of competition for the medal:

Every author entering into competition shall select his own subject for an essay.

No essay shall exceed in length twenty-four pages of the Journal.

The essay shall be on some subject connected with the practice of medicine, surgery or midwifery, physiology, or public health. It must not be in the handwriting of the author; but must be enclosed under cover, together with a sealed envelope bearing the motto of the essay, and containing the author's name and address.

The prize essay will be considered the property of the Association, and will be published in the Journal.

Essays for competition are to be sent in, addressed to the President of the Council of the British Medical Association, on or before March 31st, 1862.

By resolution of the Committee of Council.

Philip H. Williams, M.D., *General Secretary.*

DUBLIN BRANCH: ANNUAL MEETING.

The third annual meeting of the above Branch was held in the Board Room of the Apothecaries' Hall, Dublin, on Friday, March 22nd, 1861; W. Madden, M.D., President, in the Chair.

New Officers. The following officers were appointed for the ensuing year:—*President*—W. I. Harrison, Esq.; *Vice-President*—J. M'Munn, M.D.; *Treasurer*—John Shea, M.D.; *Secretary*—G. Wyse, M.D.

Resolutions. The following resolutions were passed:—

1. That the cordial thanks of this Association be given to the late President, Dr. Madden, for his efforts to promote the objects of the Association during the past year.

2. That this Branch continues to entertain the warmest feelings towards the Association, and earnestly wishes its extension and prosperity.

3. That it must be for the welfare of the profession to maintain the bond which unites, in one phalanx, every class of the medical body, under the ægis of the British Medical Association.

4. That this Branch hails the improvement which appears in the character and tone of the BRITISH MEDICAL JOURNAL, and desires to express the hope, that while the abilities of the editor are devoted to promote the interests of medical science, and to equalise and elevate the standard of medical education, he will consider it his duty impartially to advocate the rights of each and every class of the body politic.

ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS, IN CONNECTION WITH THE SOUTH-EASTERN BRANCH.

THE third and last of these meetings for the present session was held at the Sun Hotel, Chatham, on Friday, March 22nd, at 3.45 p.m. There were present: W. Sankey, Esq. (Dover), in the chair; twenty members, and two visitors.

The minutes of the previous meeting at Maidstone were read and confirmed.

The late Dr. Plomley.—It was resolved unanimously, "That this meeting desires to record its sense of the loss this Branch of the Association, and especially these district meetings, have sustained by the death of the late Dr. Plomley, of Maidstone, whose amiability of disposition and constant desire to assist in every effort calculated to uphold the dignity, and promote the harmony and welfare of the profession, will long be remembered by every member resident in this district."

New Member. Dr. Henty, of Newington, was unanimously elected a member of the Association, and of the Branch, in accordance with the laws of the Association.

The Income-tax. Dr. DULVEY reported that, in conformity with the resolution adopted at the annual meeting of the Branch at Maidstone in June last, the Secretary of the Branch had prepared a petition to the House of Commons on the subject of the income-tax. This had been signed by Mr. Fry, as president, and presented to the House by Sir F. Smith, M.P. for Chatham. A similar petition had also been presented from the medical practitioners of Rochester by Sergeant Kinglake, one of the members for that city.

Mr. MARTIN, of Reigate, secretary to the Branch, being present, urged upon the members the necessity of forwarding petitions on the same subject from the various towns and cities in the district.

Papers. The following communications were read:—

1. On some Peculiar Forms of Uterine Hæmorrhage. By J. Armstrong, M.D.
2. Presentation of both Arms. By G. Henty, M.D.
3. On the Curability of Fracture of the Neck of the Femur. By F. J. Brown, M.D.

These papers having been discussed, the thanks of the meeting were unanimously given to those gentlemen who had prepared them, and they were requested to allow them to be published in the JOURNAL. Hearty thanks were also voted to Mr. Sankey, for the interest he has manifested in these district meetings by coming from so great a distance specially to attend them, and for his kindness in taking the chair in the unavoidable absence of the president, Mr. Fry.

At 5.30, the meeting adjourned to dinner, where they were joined, as visitors, by Dr. Parkes, Professor of Hygiène at the Army School of Medicine, Fort Pitt; Dr. Gunn, Principal Surgeon of H.M. Dockyard, Chatham; Dr. Davidson, of H.M.S. *Wellesley*; and Captain Beveridge, of the Gillingham Artillery Volunteers. Letters of regret at being unable to accept the invitation of the members were read from Dr. Longmore, Dr. Hume, and Professor Aitken, of Fort Pitt; Dr. Maclean, principal surgeon of the garrison; and also from the Rev. S. Arnott, vicar of Chatham.

Special Correspondence.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

AT the last two meetings of the Midland Medical Society, some very interesting matters have been brought under notice. Mr. Gamgee related the particulars of a case in which he had removed a vesical calculus by the high method on the 13th of February. The subject of this rare procedure was a little girl aged 10, a patient at the Queen's Hospital. The suprapubic operation had been selected in the belief that the stone was a large one; and this proved to be the case, since it weighed, after extraction, 350 grains. The child's sufferings had been intense for some months, and she was pale and emaciated in consequence. A very few hours after the operation, the change in her features was most marked, and she is now happy, fat, and ruddy. No untoward symptom interrupted her convalescence, the wound has completely healed, and the urine is voided without any sign of preexisting disease.

A different but no less interesting case was under Mr. Gamgee lately in the same hospital. He had removed a lad's foot for tarsal disease by Syme's ankle-joint method, and cicatrisation had made considerable progress, when a small pulsating tumour was noticed on the inner side of the stump, corresponding to the cut end of the posterior tibial artery. On compressing the artery above at any point of its course, the pulsation ceased. The *bruit* on auscultation was well marked. Diagnosis—a circumscribed false aneurism at the extremity of the posterior tibial artery. So soon as the stump had completely healed, the aneurism meanwhile having increased to the size of a large walnut, Mr. Gamgee tied the posterior tibial artery about two inches and a half above the aneurism. For two or three days a very slight thrill was perceptible in the tumour, which then became completely consolidated, and has now totally disappeared. The stump is a very good one; pressure is well borne; and the boy (a deaf mute) is being provided with an artificial foot.

Dr. Hinds read a paper upon perforating ulcers of the stomach and intestines, embodying some very important cases and observations. The debate, occupying the whole of one meeting and a considerable portion of another, was participated in by a large number of members. No points, however, of absolute novelty were elicited, though much useful matter was contributed by the various speakers.

A case which enlarges the clinical history of knee-joint excision has lately been under the care of Mr. Baker at the General Hospital. The patient, a lad, at that time nine years old, was under Mr. Baker's charge two years ago, with a strumous enlargement of the joint; and, after remaining three months in the hospital, was discharged with a straight leg and apparent anchylosis. In some little time the knee became again affected, and he was consequently readmitted in April 1860. Treatment was ineffectual to stay the progress of the disease; and, as the continued irritation placed his life in imminent danger, an operation became indispensable, and Mr. Baker elected to perform excision, which was accordingly done last September. The cartilages were entirely destroyed; and in the right condyle of the femur was found a cavity communicating with the joint, and containing a large sequestrum. The patella, being perfectly healthy, was not removed. Speedy improvement in the general symptoms followed; but the swelling about the ends of the bones not subsiding, and some sinuses not healing, although the bones had become well consolidated, it was suspected that the patella might be in fault; and a probe, passed under it, detecting bare bone, it was wisely determined to remove it. This was done about six weeks ago, by a longitudinal incision over the centre of the bone. The patella was found surrounded by pulpy degeneration of synovial membrane; the cartilage destroyed, and replaced by bony spicula. There was bony union between the femur and tibia. He is now nearly well.

The case in which Mr. Crompton opened the knee-joint, as mentioned in my last, has left the hospital quite well, and with good use of the leg.

Progress of Medical Science.

A New Theory as to the Nature of Corpora Amylacea. The term *corpora amylacea*, or *corpora amyloidea*, has of late years been applied to certain minute bodies which are found in the brain and other organs of man and mammalia. The localities in which they are most commonly met with are the choroid plexuses, atrophied brain-tissue, and the kidneys. In appearance they are not unlike starch-globules, but differ from them in their more smooth surface, and in iodine only producing a violet colour after the addition of sulphuric acid. Virchow, indeed, maintains that they are really and truly starch; and that, when cautiously treated with dilute solution of iodine alone, they assume a pale blueish or greyish blue colour, though a great deal depends upon the proper degree of concentration of the test. Virchow's views, however, are far from being generally accepted; and most observers are agreed that the real nature of the so-called *corpora amylacea* is still a subject for investigation.

Professor Mayer of Bonn has lately proposed a new theory as to their nature. He has remarked that they bear a striking resemblance, in their appearance and reaction with iodine, to the small corpuscles which are found in the joints of tapeworms and in the interior of the cystic entozoa. Moreover, he found in the brain of a sheep that had died from the staggers, an immense number of corpuscles, both in the neighbourhood of the cœnurus and also at a distance from it, which resembled in every respect the corpora amylacea found in the brain and spinal cord of man and other mammalia. He likewise discovered an innumerable quantity of similar bodies in the brain and spinal cord of a measly pig. Professor Mayer has not had an opportunity of examining the human brain in the bodies of persons who have suffered from tapeworm; but he is of opinion that the corpora amylacea are intimately connected with the presence of entozoa in the system; and that, in fact, these bodies are nothing more nor less than the corpuscles which are found in the joints of tapeworms, and in the interior of the echinococcus and cœnurus. (Virchow's *Archiv*, bd. ix, hft. 1 and 2.)

Detection of Blood-Stains. In 1853, M. Fleichmann discovered that microscopic crystals of *hæmine* were developed when a drop of blood was treated with an excess of glacial acetic acid. Messrs. Buchner and Simon, of Darmstadt, have shown that the development of these crystals constitutes the best test which we possess for the detection of blood-stains. Even when the blood-stains have been washed out, so as scarcely to leave any colour, these crystals may still be detected, so that the test is one of extreme delicacy. In this case, however, it is necessary to add a little common salt first; because, in the attempts to wash out the stains, the saline constituents of the blood, which are necessary for the development of the crystals, have been removed.

The plan of proceeding is as follows:—The suspicious spots upon a knife are to be scraped and mixed with a little water, or the spots in linen are to be macerated in water, or, if they be very pale, in acetic acid. A little powdered common salt is added; the solution is concentrated, and treated with an excess of glacial acetic acid; and then evaporated, at a boiling heat, in a watch-glass. If there has been any blood present, microscopic crystals of hæmine are developed. These crystals are of a reddish-brown colour, and of a rhomboidal form, with more acute angles than the crystals of *hæmatoidine*, which are developed in disintegrating blood-clots. They are either single or adhere in clusters, and are in an extraordinary degree capable of resisting tests. They are figured in the English translation of Virchow's *Cellular Pathology*, p. 145.

Messrs. Simon and Buchner have carefully investigated the effects of different reagents upon these crystals, and likewise the characters presented by other crystalline substances, such as murexide, which might be mistaken for them. Their investigations are well deserving of the attention of the medical jurist. (*L'Union Méd.*, Fev. 19, 1861.)

Gastro-Cutaneous Fistula. M. Middeldorpf, in a memoir upon this subject, records a case where he operated with success. The patient was a female, aged 47, who for twenty-five years had suffered from the symptoms of what was probably a simple ulcer of the stomach, and who for five years had a fistulous communication, opening from without into the stomach, through which the food escaped. The external opening was a transverse slit, upwards of an inch in length and two lines in breadth, which was situated below the left mamma, between the cartilages of the sixth and seventh ribs. In November 1857, M. Middledorpf pared the edges of the external opening, and brought them together with twisted sutures. Two years afterwards, in August 1859, he again saw the patient, and found that the wound had healed, with the exception of a minute, almost imperceptible fistula, from which a little mucous discharge oozed away, and occasionally small quantities of the liquid ingesta escaped.

M. Middeldorpf, in his memoir, has collected from medical literature forty-seven other cases of gastro-cutaneous fistula. Of these, twenty-one were males and twenty-six females; nine of the patients died soon after the formation of the fistula; twenty-two lived for a loug time with the fistula; while in eleven the opening closed up. (*Wiener Wochenschrift*, 1860.)

Experiments upon the Human Sympathetic. Professor Wagner records the results of certain experiments, which he has recently had an opportunity of making, upon the head of an executed criminal, and which appear to prove that dilatation of the iris is due to the influence of the sympathetic nerve. The head was cut off by the guillotine, the blade of which had passed through the sixth cervical vertebra. The experiments were commenced eighteen minutes after death, and consisted in the application of an electro-magnetic current to the extremity of the great sympathetic trunk, first on one side of the neck, and then on the other. The eyelids of the corresponding eye were observed to separate, and the pupil to dilate, until the breadth of the iris did not exceed four-fifths of a line. The experiment was repeated six times in twenty-five minutes, and always with the same results. After the nervous trunks had become insensible, the superior cervical ganglion was laid bare, and similar results were obtained on applying the magneto-electric current to it. The movements had all the characters of those produced by organic muscle. (*Zeitschrift für Ration. Med.*, 3 ser., bd. v, No. 2 and 3.)

Typhoid Fever and its Treatment. Professor Pfeufer of Munich has published an analysis of the cases of typhoid fever admitted into his clinique during the winter six months of 1856-7. The cases amounted to 231, a number which indicates about the ordinary prevalence of the disease in Munich. Of the 231 cases, 119 were of a slight nature, while 112 were severe; and among these last there were twenty deaths. In seven of the cases there was a distinct relapse of the fever, and four of these seven cases died. After death, two sets of ulcers were found in the intestines, corresponding to the two paroxysms of the fever. In five of the fatal cases, there was intestinal perforation; and it is worthy of notice, that in two only was the perforation situated in the ileum. In two cases, it was in the colon; and in one, in the appendix vermiformis. In a sixth case, there were all the symptoms of perforation; but the patient, a boy aged 14, recovered under the use of large doses of opium. In one case, there was laryngitis, causing urgent dyspnœa; tracheotomy was performed, and the patient recovered.

The treatment consisted in the frequent administration of Liebig's infusion of beef. No mention is made of wine. Tincture of castoreum was prescribed when there was impending paralysis of the lungs; and the golden sulphuret of antimony when there was bronchitis, with scanty and difficult expectoration. Diarrhœa was treated with opiate enemata, and with tannin, ratanhy, and alum, by the mouth. Alum, although a less powerful astringent than tannin and ratanhy, was in most cases preferable, from its never causing vomiting. For intestinal hæmorrhage and the symptoms of perforation, opium in large and repeated doses was employed. (*Zeitsch. für Rat. Med.*, 3 ser., bd. v, No. 2 and 3.)

M. Frémy believes that he has obtained great advantage in the treatment of typhoid fever by rubbing in croton oil over the abdomen during the second week of the disease. From fifteen to thirty drops of the oil, made into an ointment, are to be rubbed in night and morning, until an eruption is produced. This application is preferable to blisters, as being devoid of the risk of gangrene. Of one hundred and twenty cases where this treatment was resorted to, only nine terminated fatally, and two of the nine patients were moribund when they came under observation. (*Répert. de Pharm.*, Oct. 1860.)

Lastly, Dr. H. Ahnes strongly recommends the administration of sulphureous and chalybeate mineral waters in the treatment of typhoid fevers. (*Gaz. Méd. de Paris*, Fev. 16, 1861.)

Thrombosis of the Sinuses of the Dura Mater. A case illustrative of this affection, occurring in an infant nine months of age, is recorded by Professor Dusch of Heidelberg, who has likewise collected fifty-seven other observations of a similar nature. From these cases he draws the conclusion, that the coagulation of the blood in the sinuses may be due to a propagation of a coagulum from the neighbouring veins in cases of caries, necrosis, and wounds of the cranium, and of extravasations of blood into the substance of the brain; or it may be owing to any cause either of a local or a general nature, which impedes the circulation of blood through the sinuses, such as a feeble heart, anæmia, the compression of the sinuses by tumours, etc.

The diagnosis of these cases during life is usually difficult; but the lesion may be suspected when cerebral symptoms supervene in a feeble infant upon an attack of profuse diarrhœa, and when, at the same time, there is bulging of the fontanelles, with distension of the jugular veins. (*Zeitschrift f. Ration. Med.*, ser. 3, bd. vii, No. 2.)

Iodide of Ammonium in the Treatment of Syphilis. Dr. Galligo of Florence has lately published a memoir in which the iodide of ammonium is spoken of as much preferable to the iodides of potassium or of sodium. He thus confirms the experience of Gamberini. The employment of iodide of ammonium is indicated under the same circumstances as that of the other iodides; but its action is more prompt; it is more easily tolerated, and less apt to produce iodism; while at the same time the treatment with this salt is less expensive, as a smaller dose suffices. Such are a few of the many advantages which this remedy is said to possess. For others, the reader must refer to Dr. Galligo's memoir, which contains the history of thirty-eight cases in which the iodide of ammonium was employed. (*La Presse Méd. Belge*, Jan. 13 1861.)

Treatment of Incontinence of Urine. Dr. Cardinale of Genoa reports the case of a man, aged 69, who had suffered for some months from incontinence of urine, and who was cured by the administration of tincture of cantharides in doses of three drops in the day. The medicine was given in almond emulsion, and at the same time an animal diet with wine was prescribed. The cure was complete in twenty-five days. (*Gazetta delli Ospedali di Genova*, Jan. 1861.)

Treatment of Colic. In a recent discussion at the Academy of Medicine, the following simple prescription was highly extolled by M. Duparcque for cases of colic, including the colic produced by biliary concretions.

℞ Sp. æth. sulphur. ʒj ; ol. ricini, syrup. simpl, āā ℥j. M.

One tablespoonful to be taken every half-hour. (*Gaz. Méd. de Lyon*, Fév. 16.)

New Treatment of Prolapsus Ani. M. Foucher recommends the subcutaneous injection of strychnia in the treatment of the prolapsus ani of infants. Ten drops of a watery solution of strychnia (gr. iij to ʒxj) are to be injected with Wood's syringe into the sphincter ani, and repeated after twenty-four hours. M. Foucher records the case of a girl aged 4 years, in whom this treatment proved entirely successful. Great improvement followed the first injection. The quantity of strychnia injected on each occasion was about one-twentieth of a grain. (*Gaz. Méd. de Paris*, Fév. 9, 1861.)

Citric Acid in Acute Rheumatism. M. Barmier reports forty-five cases of acute rheumatism treated with citric acid; and, in all but two cases, the administration of the remedy was followed by rapid improvement. The prescription employed was as follows:—

℞ Acid. citric. ʒjss; syrup. simp. ℥jss; aquæ ad ℥vj. M.

Take one tablespoonful every hour, both day and night. (*Répert. de Pharm.*, Jan. 1861.)

Glycerine and Tannin in the Treatment of Vaginitis and Leucorrhœa. A Belgian physician, Professor Soupart of Gand, has derived great benefit in the treatment of vaginitis from the local application of a solution of tannin in glycerine. The proportion recommended is one ounce of tannin dissolved in two ounces of glycerine. The walls of the vagina are to be painted over with this application; and a plug is introduced into the orifice, to prevent the glycerine from running out. Several very obstinate cases are recorded, which yielded at once to this treatment. (*Journ. de Méd. et de Chir.*, Fév. 1861.)

ETIOLOGY AND TREATMENT OF ECZEMA. During the year 1859, 193 cases of eczema were admitted into Professor Hebra's clinique. Of the 193 patients, 118 were males and 75 females; 101 cases were between ten and twenty years of age, 37 between twenty and thirty, and 26 between thirty and forty; 5 cases were under ten, and 24 cases above forty. In 48 cases, the disease was in the upper extremities; in 42, in the lower; in 22, on the face; in 21, on the head; in 18, on the trunk; etc. The causes of the disease were made out in about half of the cases, and were chiefly friction of the clothes and of the hat, a high temperature, innunction of irritating ointments, corrosive substances, varicose veins, disordered menstruation, etc.

As to treatment, cold applications, or dusting over with powdered starch, were found sufficient in cases of simple eczema. In the other forms of the disease, local applications of cod-liver oil or of tar, or of these two substances combined, were employed. In cases where the integuments were swollen, the tar and cod-liver oil were preceded by the application of sapo viridis (See BRITISH MED. JOURN., Jan 12, p. 51) and the cold douche. In cases where the menstruation was disordered, the appropriate internal treatment was combined with the external remedies. (*Spitals-Zeitung*, Jan. 5, 1861.)

EMPLOYMENT OF PIGS' BLADDERS FOR POULTICES. A Belgian surgeon, M. Dechange, in cases of whitlow and other forms of inflammation about the fingers and toes requiring poultices, is in the habit of introducing the poultice into the interior of a pig's bladder. The diseased finger is then plunged into the poultice, and the orifice of the bladder is made tight above. Evaporation is thus prevented, and additional heat may be applied by introducing the bladder into tepid water. It is suggested that pigs' bladders are quite useless for any other purpose, and that their substitution for linen in hospitals would be a matter of considerable economy. (*Archives Belges de Méd. Milit.*, 1860.)

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, MARCH 26TH, 1861.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

FURTHER OBSERVATIONS ON THE STRUCTURE AND TREATMENT OF UTERINE POLYPI. BY ROBT. LEE, M.D., F.R.S.

THE author commenced his communication by stating that until a recent period the anatomical structure of the different varieties of uterine polypi was imperfectly understood, and they continue at the present time to be confounded by many writers with the malignant or cancerous disease of the uterus. Fleshy tubercles or fibrous tumours of the uterus were first described by Dr. William Hunter, but it does not appear that he had observed any of those tumours which had passed through the os uteri and become polypi. The similarity of structure between fibrous tumours of the uterus and polypi was first pointed out by Dr. Baillie, and many writers have since inferred that all uterine polypi are fibrous tumours, or, as they are now termed by some, "fibroids" of the uterus. Cancerous fungous tumours of the os and cervix uteri had been described by Dr. Baillie as "another sort of polypus," though an entirely different disease. In a paper on "Fibro-Calcareous Tumours and Polypi of the Uterus," published in the nineteenth volume of the *Medico-Chirurgical Transactions*, the author stated that he described four or five varieties of tumour of the uterus, not cancerous, to which the term polypus had been applied. In a supplement to this paper, published in 1850, he described the arteries and veins which ramify throughout the substance of these tumours. A series of preparations were placed upon the table of the Society, to illustrate these varieties of polypi.

The object of this communication was to state the results of all the cases of uterine polypi which had come under the author's own care, and which he had seen under the care of other practitioners. An abridged history of these cases, reduced into a tabular form, accompanied the paper.

In 3 of these 103 cases no operation was performed. In 2 of the remaining 100 cases the polypi disappeared spontaneously. Of the 98 cases which remained 5 died before any attempt had been made to remove the polypi by ligature or any other means. Of the 93 which remained, 85 recovered and 8 died.

By referring to the table, it would be seen that in the first of these fatal cases the patient was insensible and moribund when the ligature was applied by Mr. Perry, at the St. Marylebone Infirmary. This was the first case adduced by a recent writer on the diseases of women to prove that of 20 cases recorded by the author the mortality was usually greater than in lithotomy, placenta prævia, and malignant cholera. In 6 only of the fatal cases, after the application of the ligature, could the death be attributed to the operation.

"By an examination of this table of 103 cases of uterine polypi," the author added in conclusion, "it will be seen that of the last 56 cases which have come under my own care, and in which the operation for the removal of the polypi has been performed by me, not one patient has died. The various methods of treatment adopted in these cases, having been minutely described, do not require to be again detailed."

A CASE OF ELEPHANTIASIS ARABUM AFFECTING THE LEG; WITH AN ANATOMICAL EXAMINATION OF THE STRUCTURES MADE AFTER AMPUTATION. BY HENRY THOMPSON, F.R.C.S.

A woman, aged 42 years, had suffered from gradually-increasing enlargement of the right foot and leg, which commenced six years ago. Simple chronic ulceration had affected it for many years previously. She had never been in India, but her husband, a soldier, had been there five years, and returned invalided. They lived together eighteen months afterwards, when he died of acute pleurisy. Her family has not been healthy, although she, with the exception of the leg affected, has enjoyed excellent health. Of late the limb had greatly increased in size, and was subject to very frequent attacks of inflammation and violent pain, disabling her from following any occupation, and for the treatment of which she had been an inmate of the Marylebone Infirmary twenty-two times within two or three years. It was on this account she wished very earnestly that it might be removed, and she was admitted into University College Hospital, under Mr. THOMPSON's care for that purpose. The measurement round the heel and instep in the left leg was twelve inches; in the affected one, seventeen inches and a half. This was a fair index to the comparative magnitudes throughout; but the difference ceased altogether just above midleg. The author amputated immediately beneath the knee, on the 9th of January, 1861, and she left the hospital, after progressing very favourably, in about five weeks. Dr. Harley, Professor of Histology at University College, made a careful anatomical and microscopical examination of the limb, the summary of numerous details being, that he found "the muscles and tendons, as well as the bones and cartilages, in no way implicated in the disease; even the subcutaneous areolar tissue appears to be perfectly normal. The disease, in the present case at least, is essentially a disease of the skin, and more especially of the true skin, or derma, the changes occurring in the epidermis being probably the result of disordered nutrition, and secondary to those occurring in the true skin."

HARVEIAN SOCIETY OF LONDON.

Saturday, March 16th, 1861.

E. H. Sieveking, M.D., President, in the Chair.

ON THE INFLUENCE OF OZONE ON ORGANIC SUBSTANCES.

BY T. K. HORNIDGE, ESQ.

The author, after observing that the peculiar reactions of ozone upon organic substances had suggested the idea that it plays some part in the processes of nutrition, took a survey of its sources and nature. He referred to its generation by electrical disturbance, whether frictional or dynamic, by the action of sunlight on oxygen, by evaporation, and by the respiration of plants. He considered the only satisfactory theory of its nature to be that propounded by Schönbein, which regarded it as allotropic or negatively polarised oxygen, being opposed to an opposite condition of "positive" oxygen, or antozone. He referred to the two classes of peroxides ensuing from this difference; the peroxides of hydrogen, the alkalis, and alkaline earths containing antozone, the peroxides of certain metals ozone. He illustrated their contrary natures by that beautiful experiment, the mutual decomposition of permanganate of potash and peroxide of hydrogen, with the evolution of oxygen. He noticed the probability that the generation of ozone is always accompanied by that of antozone, which would account for the impossibility of ozonising more than a very small proportion of the oxygen operated on, there being a constant tendency to a reunion of the ozone and antozone.

The great oxidising powers of ozone were then dwelt upon, and its consequent service as the disinfectant of nature, the author taking occasion to point out the insufficiency of the ordinary test of ozone, the only quantitative test being one suggested by Dr. Bernays and himself, namely, an estimate of the amount of alkali set free from iodide of potassium. The author then detailed, so far as at present known, the effects of ozone—1. On pure organic bodies; 2. When inhaled; and 3. When taken into the alimentary canal. Blood, shaken with ozone, is, in a few hours, blackened; subsequently, it is entirely oxidised, leaving little or no trace of organic matter. The only known products of this action are carbonic acid and water; what becomes of the nitrogen is uncertain. The blackening appears to be the first physical sign of degeneration. The apparent identity of change in the body, from arterial to venous blood, suggests the possibility of an identical cause; but it remains to be proved whether any similar degeneration, accompanied by the generation of ozone, occurs in the body, as a result of the ministration of the corpuscles to the function of nutrition.

The author then stated that no other organic substances are acted on to the same extent as blood. Albumen is never completely destroyed; casein behaves like albumen. All pure excretory matters, as bile freed from mucus, fat, and colouring matter, urea, allantoin, alloxan, kreatin, are unacted on. So, too, are fibrine, gelatine, and sugar, although they are oxidised in the system. Experiments on the tissues are of no value, on account of the blood which they contain.

The author also referred briefly to Professor Hoppe's experiments on the effects of ozonised oil introduced into the alimentary canal, expressing a belief that the great energy of the action was due to some change in the oil itself, and not simply to the presence of ozone.

Correspondence.

MODERN VIEWS OF CHLOROFORM.

Letter from Chas. Kidd, M.D.

Sir,—With reference to chloroform, as dwelt on in the last number of your Journal, I would wish, with your permission, to make one or two remarks.

It may seem strange that no one at the Medical Society of London could answer the question put by Mr. Hart and Mr. J. F. Clarke as to what is the relative mortality of hernia cases since chloroform was discovered, and previous to that epoch. I was very unwilling at that meeting to discuss the paper of my friend Mr. Bryant, as I had at least twice before, once in the *Lancet* and once in the *Medical Circular*, published precisely similar facts and opinions as to the value of chloroform in hernia. Mr. Clarke's question is, however, an important one; and it may be answered in this way. Taking the older archives of St. Bartholomew's, of about sixty or seventy years ago, and the cases of the last five years (Mr. Stanley, I think, is the only man in London who has gone into the question), and taking the practice in hernia in the times of Mr. Pott and Mr. Abernethy, and comparing it with that of such surgeons as Mr. Erichsen, Mr. Hilton, Mr. Skey, or Mr. Stanley himself, the relative mortality by chloroform and opium has been, so to speak, inverted; and where, in the so-called classic era of Astley Cooper and Abernethy, about 70 per cent. of the hernia operations went from bad to worse, dying miserably of the operation, now, thanks to chloroform, fully 70 per cent. of such cases are saved. In fact, all the operations do well now, where the old surgical canons of salts and jalap after the operation, tobacco, ice, injections, warm baths, etc., are disregarded, and the taxis has not been injudiciously used out of doors.

As to a letter by Dr. Sansom in the same number of your Journal, who seems to be an amateur in the science of anæsthetics, it is not so easy to reply to his communication, so full of contradictions. He says of iridectomy, "I have never observed any ill result from chloroform prior to iridectomy"; but admits accidentally in another part of his note that he has never seen iridectomy at all, or chloroform in that operation; the operation being not orthodox at the Westminster Ophthalmic. It is not my duty *tantas componere lites*. I have only "Braithwaite" by me; but, with his usual accuracy, he gives Mr. Hancock's *dernier mot* on this subject of iridectomy. He ought to be as good a judge as Dr. Sansom, who is obviously what is called in America something of a "know nothing". Mr. Hancock gives eleven objections to iridectomy; the chief or first in order is, that the incision in this operation is much too large. The next in degree is stated in these words: My operation is free from the danger of iridectomy, "as it is attended with so little pain, there is no necessity for chloroform; *the sickness and accidents resulting therefrom are consequently avoided*." And he then goes on to explain the nature of the incision, the danger of hæmorrhage and chloroform in the Graafian operation. Extirpation of the eyeball, too, he rather hints having been necessary in some cases of iridectomy, from chloroform, vomiting, and sickness.

But Dr. Sansom goes on to say he has failed to discover that any light has been thrown on the question by the note you favoured me by inserting on the 9th. Now it must be remembered that patients in hospitals nearly all request to have chloroform in painful operations. The *dictum* of the surgeon (too often expressed against chloroform) goes for very little, as the patient says, "I have to bear the pain, not the surgeon." My object for some time has been to discover a remedy for this troublesome vomiting—with what success I must leave the persons who have any experience of chloroform and eye-surgery to judge, not Dr. Sansom, who has evidently much to learn and unlearn on chloroform.

The most curious part of this letter, however, is where Dr. Sansom can see no difference between the condition effected by a maximum dose and a minimum one, as the patient must have passed through the latter to the former; that is to say, Dr. Sansom takes out his watch to wind it, opens it entirely to look at the lever how it ticks; and there is no difference—none whatever!—whether he thrusts back his watch quite open into his pocket, or takes the precaution to shut it. The patient in cataract, no doubt, passes through the plunging, vomiting, and convulsion of chloroform, on his way to the deep stage, as I recommend it; but the eye is still untouched or shut. To this succeeds a stage of perfect stillness and anæsthesia, favourable to operation; but in the plan referred to by Mr. Hancock, and partly advocated by Dr. Sansom, we have this plunging and vomiting; but the eye is *open*. A Beer's knife has gone through it, if it be cataract; and the "vitreous" trembles like a bit of jelly. A lecturer at St. Thomas's still quietly tells his ophthalmic class, as high fun, "It is an old and true saying, gentlemen, you must lose a hatful of eyes before you are good operators for cataract." I believe Dr. Sansom's views of chloroform would assist this consummation, most devoutly to be discountenanced. Several of the opinions of my lamented friend, the late Dr. Snow, are now proved to be erroneous, or to be incorrect interpretations of facts. Of these, perhaps the danger of vomiting and maximum doses in eye-surgery are not the least. I am, etc.,

Charles Kidd.

Sackville Street, Piccadilly, March 21st, 1861.

THE TURKISH BATH.

Letter from Edward Haughton, M.D.

Sir,—Having just read, in your impression of this day, a letter from Dr. Thudichum, of an exceedingly violent and acrimonious nature, I take the liberty of sending you the proof-sheets of a pamphlet which I am publishing, and in which I oppose some of his conclusions. Having been several years longer engaged in advocating the bath than Dr. Thudichum, and having, moreover, been at the special trouble and expense of going to Constantinople in order to investigate its nature and effects, I think I may be allowed to have some information on the subject; and I beg to say that, to my certain knowledge, there is at present a large proportion of the medical profession favourable to the bath, provided it be used with judgment, *and its principle be correct.* If the profession merely judged from what they can see in London, I do not wonder at their opposition; but you will see from my pamphlet the principle which I recommend. I am, etc.,

Edward Haughton.

Medical Institution, Liverpool, March 16th, 1861.

P.S. It would appear that, in the opinion of some physiologists, the *undue* development of oxygen in the system is immediately followed by its union with carbon, and *the consequent evolution of carbonic acid gas;* so that the intoxication by nitrous oxide and by chloroform is in reality due to the same agent, viz., carbonic acid. This, if true, will furnish the clue to the difference in the conclusions of Drs. Richardson and Thudichum.

Medical News.

APPOINTMENTS.

Divers, Edward, M.D., elected Professor of Materia Medica in the Queen's College, Birmingham.

*Haward, Edwin, M.D., elected Physician to the Westminster General Dispensary.

M'Kechnie, William, M.D., elected Physician to the Infirmary, Paisley.

Richmond, D., M.D., elected Physician to the Infirmary, Paisley.

Wormald, Thomas, Esq., elected Surgeon to St. Bartholomew's Hospital (after twenty-three years service as Assistant-Surgeon), in the room of E. A. Lloyd, Esq., resigned.

Royal Army. The following appointments have been made:—

Campbell, Assist.-Surg. J. C., M.D., to the 42nd Foot, *vice* Maclean.

Wilson, Assistant-Surgeon E., to the 4th Light Dragoons, *vice* Campbell.

Royal Navy. The following appointments have been made:—

Evans, O., M.D., to be Inspector-General of Hospitals and Fleets, on the retired list.

Miles, Edward F., Esq., Assistant-Surgeon, to the *Procris*.

Parker, Innies, Esq., Acting Assistant-Surgeon, to the *Isis*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Adams, E. B., Esq., to be Surgeon 3rd Administrative Battalion Suffolk R.V.

Bullen, G., Esq., to be Surgeon 2nd Administrative Battalion Suffolk R.V.

Hind, A., Esq., to be Assistant-Surgeon 1st Brigade, 1st Corps, Kent A.V.

To be Honorary Assistant-Surgeons:—

Blackford, J. C., Esq., 4th Administrative Battalion, 33rd Company, Staffordshire R.V.

Dolman, A. H., Esq., 5th Derbyshire R.V.

Marr, J., Esq., 16th Durham R.V.

Wollaston, R, M.D., 4th Administrative Battalion, 23rd Company, Staffordshire R.V.

DEATHS.

Barker. On March 24, at Weymouth, aged 49, Susannah P., widow of the late W. D., Barker, M.D.

Blagden, Richard, Esq., Surgeon-Accoucheur to the Queen, at Bath, aged 72, on March 31.

Broadbent, William H., M.D., at the Hollies, near Warrington, aged 32, on March 22.

Darling. On March 29th, in Russell Square, Margaret, daughter of George Darling, M.D.

Goodeve. On March 27. aged 46, Mary C., wife of William J. Goodeve, Esq., Surgeon, Clifton.

Laing, William C., Esq., late of the H.E.I.C. Medical Service, at Exeter, aged 61, on March 23.

Larken, Edmund L. M., M.D., H.M. Indian Army at Bombay, aged 26, on February 19.

*Morris, Robert R., Esq., Brixworth, aged 56, on March 25.

Nash, Wm. H., Esq., Surgeon, at Leatherhead, aged 50, on March 25.

Ogilvy. On April 1, at Perth, aged 78, Marcia A. S., widow of Alexander Ogilvy, Esq., late member of the Bengal Medical Board.

Smart. On March 27, at Mile End, aged 67, Louisa, widow of the late Thomas Smart, Esq., Surgeon.

Squire, Richard J., Esq., Surgeon R.N., on board the *Beyrout*, on March 20.

Tatham, Christopher, Esq., Surgeon, at Newby Place, Poplar, aged 70, on March 28.

Wallis, Edward, Esq., Assistant-Surgeon, Fane's Horse, at Tieutsin, China, in December last.

Williams, Thomas T., M.D., at Blackheath, aged 72, on March 24.

Workman, Wm., Esq., Surgeon, at Reading, aged 23, on April 3.

The Royal Hospital for Incurables lately held its annual dinner. £1,400 were collected for the charity.

The Scientific Congress of France meets this year at Bordeaux on the 16th of April.

Curious Malformation. M. Geoffroy Saint-Hilaire has presented to the Academy a photograph of a youth, 14 years of age, who has a peculiar malformation, which has been called "*peadelphe*." His right leg is divided into two limbs, both terminated by feet, which, however, point in opposite directions.

Greenwich Hospital. Assistant-surgeon William H. Adam, 1853, recently serving in the Royal Hospital at Plymouth, has been appointed to the Military Department at the Royal Hospital at Greenwich.

The Army Medical School. The reopening of the Army Medical School at Fort Pitt took place on the 1st inst., on which occasion the customary address was delivered to the students by Professor E. A. Parkes, M.D.

Infanticide. On last Monday morning the bodies of two newly-born infants were found floating in the Thames off two of the numerous wharves with which the river is lined. They were removed to Lambeth deadhouse, to await a coroner's inquiry.

Small-pox in China. It appears by a letter from China that, in addition to General Collineau, already announced, seven officers of the garrison at Tien-tsin have died of small-pox; there has also been considerable mortality among the non-commissioned officers and soldiers.

Fibrine in Mania. Dr. W. C. Hood, in his paper read last year at the Royal Medical and Chirurgical Society, arrives at the conclusion, "That there is a marked deficiency of fibrine during the period of maniacal excitement, and a correction of this deficiency during convalescence."

Medical Classes in New York. Notwithstanding the political troubles, students from the *Southern*, as well as the Northern States, are already matriculating at the Long Island College Hospital. We are pleased to hear that the prospects are flattering for a good class during the regular session. (*Amer. Med. Times.*)

Silent Literature. The admirable authors or proprietors of the *Silent Friend* inform us, per advertisement, that this favoured production has reached its two hundred and ninetieth edition, "the sale having exceeded upwards of five hundred thousand copies". So much for "Physical Disqualifications, Generative Incapacity, and Impediments to Marriage."

Action of Alcohol. "Blessings be on the man who invented alcohol! All the ethics that ever were written cannot work the same miracle in a man's nature as a glass of whisky. Talk of all the wonders of chemistry; and what are they to the simple fact that two pennyworth of cognac can convert a coward into a hero." (*Once a Week.*)

Illumination. It appears that the difference in the illuminating power of the same gas may vary twenty per cent., when tested at the highest and at the lowest points of the barometrical range in this country, from the effect of the rarefaction of the air alone, without taking into consideration the different densities of the gas at the opposite degrees of pressure.

American Immigrants. Of the 5,000,000 immigrants who have arrived since the establishment of our government in 1784, Great Britain and Ireland contributed 2,600,000; Germany, 1,600,000; France, 200,000; British America, 100,000; Sweden and Norway, 50,000; China, 50,000; Switzerland, 40,000; West Indies, 36,000; Holland, 18,000; Mexico, 16,000; Italy, 8,000; Belgium, 7,000; South America, 5,500; Portugal, 2,000; Azores, 1,300; Russia, 1,000. (*Amer. Med. Times.*)

St. Mark's Ophthalmic Hospital, Dublin. "The system of partial payments", says the Report, "adopted at this institution eighteen years ago—so as to render the dispensary department partly self-supporting, and thus relieve the charity and encourage a spirit of honourable independence among the people, as well as to conduce to habits of order and regularity—still continues to work well. While the pauper is never denied the benefits of the dispensary, those who are able to afford a trifle cheerfully pay the 6*d.* a month required by our rules. The objection to this system consists in persons in good circumstances availing themselves of it, and thus defrauding the charity, by occupying the time and consuming the medicine intended for the pauper, the labourer, or the artisan, as well as doing injury to the general practitioner or the vendor of medicines."

Treatment of Tinea by Carbonate of Copper. Dr. Huet, physician to a large establishment for the reception of young criminals, many of whom, upon their admission, are found to be suffering from tinea favosa, has made an extensive trial of this plan of treatment, respecting which he reports very favourably. The head is to be thoroughly cleansed by means of cataplasms, and the hair to be shaved off; after the crusts have been entirely removed, the carbonate of copper is to be applied in the form of an ointment, consisting of one part of the carbonate of copper, and fifty parts of purified lard. It is occasionally requisite to suspend the application of the ointment, and to make use of the poultices for a few days before resuming its employment. (*Répertoire de Pharm.*)

University of London. The election of examiners in this University is fixed to take place on Wednesday, the 24th inst.,—namely, two in classics, with £200 a-year each; two in the English language, literature, and history, with £75 a-year each; two in the French language, £50 each; two in the German language, £30; two in the Hebrew text of the Old Testament, the Greek text of the New Testament, and Scripture history, £50; two in logic and moral philosophy, £80; two in political economy, £30; two in mathematics and natural philosophy, £200; two in experimental philosophy, £75; two in chemistry, £150; two in botany and vegetable physiology, £75; two in geology and palæontology, £75; two in law and the principles of legislation, £50; two in medicine, £150; two in surgery, £150; two in anatomy and physiology, £150; two in physiology, comparative anatomy, and zoology, £100; two in midwifery, £75; two in materia medica and pharmacy £75.

Disease of the Heart in Children. Dr. William Moore gives the following statement of the frequency of diseases of the heart in early life:—"Of 2,584 children treated at the Manchester Clinical Hospital, diseases of the heart and circulation occurred in sixteen. Among 411 patients treated in the Hospital for Sick Children, Great Ormond Street, London, only four, three females and one male, two under, and two above ten years, suffered from diseases of the heart; and of 9,867 cases, as externs, thirty-three instances of cardiac disease were observed, of which thirteen were females, and twenty males; three above, thirty under eleven years of age. Of 3,500 cases treated at the Institution for Diseases of Children, Pitt Street, there were only eight cases of chronic cardiac disease observed (congenital malformations excepted), four of which were females, and four were males, the females aged respectively five, seven, and fourteen years; the males six, eight, eleven, and fifteen years."

Birth of Triplets. Dr. Charles Armstrong of Cork relates the following curious case: "Margaret Riardon, aged 30, was walking smartly, when she was suddenly seized with 'slight stitches,' and in a few minutes, without lying down, gave birth to a fœtus, on the footpath, which she wrapped in her apron and repaired to an adjoining house, where, within an hour, she was delivered of two more, shortly after which she was driven home in a jolting car, a distance of two miles, along a hilly road, she all the while being in the upright position. Two of the children lived for nearly an hour, the third for twenty-one hours, they being at the seventh month of utero-gestation. The mother is a poor woman, who, twice a-day, in all weathers, walks into Cork, carrying a heavy 'can' on her head, and distributing milk at a number of houses. She was paying her second daily visit when this unusual accouchement took place, since which she has been going on without a bad symptom. Truly did Sterne write, that 'God tempers the wind to the shorn lamb.'" (*Dublin Med. Press.*)

Deep Ocean Mysteries. Dr. C. Wallich, who accompanied the recent expedition to survey the projected North Atlantic Telegraph route between Great Britain America, has proved that at a depth of two miles below the surface animal life exists. Here, where the pressure is calculated to amount to at least one ton and a half per square inch, and where it can hardly be conceived that the most attenuated rays of struggling light can penetrate, Dr. Wallich has not only discovered the minute infusorial *foraminifera*, whose calcareous envelopes protect them from pressure, and whose organisation is of the simplest, but he has obtained from a sounding, 1,200 fathoms deep, a number of star-fishes (genus *Ophiocoma*) adhering to the lowest fifty fathoms of the deep sea line, which must have rested on the bottom for a few minutes, so as to allow these star-fishes to attach themselves to the rope; so that it is now established that these regions of watery desert and everlasting darkness there exists a "highly organised species of radiate animal, living, entwining, and flourishing, with its red and light pink tints as clear and as brilliant as its congeners which dwell in shallow and comparatively sunshiny waters.

Vital Influences. The Scottish Registrar-General's report shows the influence of season on the number of births. The births in March, April, May, and June are considerably more numerous than in other months of the year. In England the excess is spread more over the entire first half of the year. In Scotland the marrying months are June and December. In England the last quarter of the year is the season of most marriages. As for deaths, the cold time is their "season;" but there is another important influence—density of population. In Scotland last year, in the eight largest towns, the mortality was at the rate of 286 deaths in every 10,000 persons; in the smaller towns 221; in the rural districts only 170. The Registrar-General remarks, in his monthly report, that the more feeble health, the less vigorous constitution of the townsman, renders him liable to succumb under attacks of illness from which his rural neighbour would recover. We must live in towns, but much may be done for them by open spaces, the removal of noxious exhalations and sources of dampness, and keeping people from getting closer together than need be; and it is only literal fact that it is matter of life and death that it be done to the utmost.

Attempt at Suicide by Swallowing Chloroform. Dr. Fennell, of New York, relates a case of attempted suicide by chloroform. Julia Wilson, aged 18, swallowed one ounce of chloroform. She walked the length of the parlour twice, placed the empty phial on the mantel-piece, and then fell heavily on the floor. The noise occasioned by the fall soon brought several members of the family to her assistance. Dr. Fennell arrived at the house about twenty minutes after the drug had been taken. She was lying on the sofa, complaining of a burning sensation at the stomach. The pulse was feeble and quick, the countenance pallid, and the extremities cold. She refused to take any medicine, but, with the assistance of those around her, Dr. Fennell succeeded in forcing down the throat one ounce of powdered ipecacuana mixed with a little warm water. In a few minutes she commenced vomiting, the odour of chloroform being distinctly detected in the materials ejected from the stomach. She, however, became gradually comatose, with stertorous breathing, pulse feeble and rapid, pupils contracted and insensible to light. The finger rubbed over the conjunctiva gave no evidence of sensibility. It was now forty minutes from the time that the poison had been taken. Mustard applications were freely applied to the extremities, cold water dashed on the face, and flagellation kept up at short intervals. She remained in this condition about half an hour, when consciousness became gradually restored. As this took place, she passed through the different stages usually observed in persons who take chloroform by inhalation. At 11 o'clock p.m., just three hours from the time the anæsthetic was taken, she was in her usual health, having entirely recovered from its effects. (*American Medical Times.*)

The Scientific Societies. At the Linnean Society on March 21st, Mr. David Moore exhibited flowering specimens of *Megacarpœa polyandra*, a remarkable cruciferous plant, with numerous stamens, from the Glasnevin Botanic Garden, where it was originally raised from seeds collected in the Upper Himalaya by the late Major Madden. The following papers were read: 'On the Possibility of taking a Zoological Census,' by A. Newton, Esq., M.A.; 'On the True Nature of certain Structures appended to the Feet of Insects and Arachnida,' by Tuffen West, Esq.—At the Zoological Society, on March 26th, Mr. Tegetmeier made some observations on the variations in plumage of Gallinaceous Birds, with particular reference to the hitherto undescribed case of male game-cocks adopting the female dress, of which he exhibited a fine living example. Dr. Cobbold read a classified list of Entozoa from animals that had died in the Society's Gardens in the years 1857-1860, among which were several undescribed species. Dr. Günther pointed out some peculiarities in the anatomy of *Monitor Niloticus*, from a specimen which had recently died in the Society's Gardens, and described a new genus of Australian Freshwater Fishes, for which he proposed the name Nanoperca. Dr. Crisp exhibited specimens and drawings of Cysticerci from an Eland which had died in the Society's Gardens. A paper was read by Mr. R. F. Tomes, Corresponding Member, 'On the Bats of the Genus Vampyrus, and their Allies.' Dr. Sclater pointed out the characters of some new species of American Passerine Birds from his own collection. At the Chemical Society, on March 21st, Dr. Williamson read a paper on 'On Thermodynamics in relation to Chemical Affinity.' Assuming the dynamical theory of heat, he showed that the chemical activity of a body was proportional to the amount of heat associated with it.

Death from Absorption of Arsenic. We take the following case from *Dublin Medical Press.* "Anne Wynne was indicted for the manslaughter of Michael Rudkin by applying a plaster containing arsenic to a sore on his leg, by the absorption of which his death was occasioned. Dr. Cronin attended deceased the evening before his death; found him suffering from vomiting, and complaining of burning in his stomach and throat, and excessive thirst; saw nothing to account for his symptoms until he learned that he had a sore leg; got him with much difficulty to show him the sore; found it covered with a plaster and greatly inflamed and swelled, and the margin inflamed; took off the plaster, sealed it up, and gave it to constable Gargan; believes his state was occasioned by the absorption of an irritant poison through the ulcer out of the plaster; prescribed laudanum to allay the irritation, also whiskey as a stimulant; he died next day; made a post mortem examination; found the thorax, pericardium, peritoneum, and interior of the intestines inflamed; took out part of the lungs, kidneys, liver, and viscera, and enclosed them in a jar, which he handed to head-constable Gargan; believes deceased died from absorption of an irritant poison. Dr. Geoghegan proved that he analysed the plaster and contents of the jar; the jar contained the stomach, the spleen, one kidney, liver, part of the lungs, and small intestine, and blood from these parts; the liver, kidney, and blood, contained traces of arsenic; the plaster contained white arsenic, sulphur, oxide of copper, oxide of iron, and fatty matter; there were ten grains of white arsenic in the plaster, or about one-sixteenth of its entire contents; it was the same arsenical preparation as that found in the liver; believes from listening to the evidence that deceased died from the absorption of the arsenical poison. In the course of his observations the learned judge passed a high eulogium on Dr. Geoghegan and his attainments and reputation as a man of science. The jury convicted the prisoner." We are not told, curiously enough, how long the plaster had been kept on the leg.

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday..... St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.
Friday. ...... Westminster Ophthalmic, 1·30 p.m.
Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Royal College of Physicians, 8.30 p.m.: Dr. Beale, "On the Structure and Growth of Tissues."—Medical, 8.30 p.m.: Clinical Discussion.—Royal Geographical.
Tuesday. Royal College of Surgeons, 4 p.m.—Royal Medical and Chirurgical, 8 p.m., Ballot for Members; 8.30 p.m., Dr. Humphry of Cambridge, "On the Growth of Bones and of Stumps"; Dr. Sansom, "On the Action of Chloroform."—Zoological.
Wednesday. North London Medical, 8 p.m.—Society of Arts, 8 p.m.—Geological.—Royal Society of Literature.
Thursday. Royal, 8.30 p.m.—Antiquarian.
Friday. Royal Astronomical, 8 p.m.—Royal Institution.
Saturday. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—March 30th, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys ..1031 Girls.. 963	1974	1236
Average of corresponding weeks 1851-60		1881	1580

Barometer:
Highest (Mon.) 29.747; lowest (Wed.) 29.316; mean 29.526.
Thermometer:
Highest in sun—extremes (Sun.) 111 degrees; (Mon.) 52 degrees.
In shade—highest (Sun.) 61 degrees; lowest (Fri.) 36.5 degrees.
Mean—46.2 degrees; difference from mean of 43 yrs.+3.7 degs.
Range—during week, 34.5 degrees; mean daily, 16.2 degrees.
Mean humidity of air (*saturation*=100) 96.
Mean direction of wind, S.W.—Rain in inches, 0.36.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

An Old Antiquackery Petition.—Sir: Permit me to ask you for the source of a very curious document which has found its way into your Journal, and to which my attention has only just been called. It is entitled "Antiquackery Movement in Olden Time", and is printed in No. iv of the new series of the Journal, page 106. I wish particularly to know where the original of the document is to be found. I am, etc.,

Dryasdust.

S. P.—Perhaps you may think the following bits of Yankee wit worth a corner in your notices. *Fas est ab Americano doceri*, is it not? "Those desiring to discontinue the *Reporter*, can do so by simply neglecting to forward the amount of their subscription when due. It will not be sent long after the subscription has expired! Except in some of the larger cities, we do not send agents to collect subscriptions." (*Med. and Surg. Rep.*)

"*The Louisville Medical News* closes its existence with the December number. The cause of death will be seen from the following closing editorial of Dr. Benson. '*To Delinquent Subscribers.*—Gentlemen, your kindness has been our ruin—your favours, our destruction—your smiles, our tears—your approval, our bankruptcy. How rejoiced you must be, when you read this, our epitaph; and, with your Havana curling its grateful clouds above you, thank God that you yet outlive the storm. We envy not the digestion of your next meal; but were it shingle nails and crab cider, it should lie more easily upon your stomach, than the consciousness of your unjustice, upon your memory. *To Subscribers not in Arrears.*—Gentlemen, we desire to thank you for your promptitude, and express our deep regret that your numbers had not been greater.'"

F. H. H.—We have not seen the "Satirical Work of Fiction"—Loose Screw—referred to by our correspondent; and therefore cannot assist him in the matter.

SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 1861.

COMMUNICATIONS have been received from:—Dr. P. H. Williams; Dr. James Russell; Dr. David Nelson; Mr. Price; Dr. Graily Hewitt; Mr. T. M. Stone; Dr. Thomas Skinner; Dr. Murchison; Mr. Dulvey; Mr. Pemberton; Dr. Lankester; Mr. H. Lee; Mr. L. Wood; Dr. T. J. Walker; Dr. G. Wyse; Dr. Styrap; Mr. Jessop; Professor Day; Mr. J. Hutchinson; Dr. A. T. H. Waters; Mr. G. G. Gascoyen; Mr. F. H. Hartshorne; Mr. J. H. Crisp; Dr. F. J. Brown; Dr. G. Henty; Dr. J. Armstrong; Mr. J. W. Workman; Mrs. Baines; Dr. Haward; and Mr. E. Crossman.

BOOKS RECEIVED.

1. Ten Lectures Introductory to the Study of Fever. By Andrew Anderson, M.D. London: Churchill. 1861.
2. Thirteenth Annual Report of the Manchester Medico-Ethical Association. Manchester: 1861.
3. The Trial of Joseph Hodges for Carnally Abusing one Maranata Freestone. By J. Wybrants, M.D. Shepton Mallet: 1861.
4. The Stomach and its Ailments Practically Arranged. By W. S. Oke, M.D. London: Richards. 1861.
5. Elements of Medical Zoology. By A. Moquin-Taudon. Translated and Edited by Robert Thomas Hulme, M.R.C.S.E. London: H. Baillière. 1861.
6. The Physical Examination of the Chest in Pulmonary Consumption and its Intercurrent Diseases. By S. S. Alison, M.D. London: Churchill. 1861.
7. The Eastern or Turkish Bath. By Erasmus Wilson, F.R.S. London: Churchill. 1861.
8. Imperfect Digestion; its Causes and Treatment. By A. Leared, M.D. Second Edition. London: Churchill. 1861.
9. On Urine, Urinary Deposits, and Calculi. By Lionel S. Beale, M.B., F.R.S. London: Churchill. 1861.

Practical Observations

ON

"SUPPORTING THE PERINÆUM."

BY
GRAILY HEWITT, M.D., M.R.C.P.,
PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL; LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

[*Continued from page 355.*]

2. *The Effects of the Procedure "Supporting the Perinæum' on the Perinæum itself.* In order that we may deal with this part of the subject in a fitting manner, it is necessary to give a little consideration to the mechanism of the process by which the perinæum is distended, and provision made for the passage of the head of the child through the vaginal outlet; in other words, to study the *behaviour of the perinæum during normal labour.*

The effect of the pressure of the head of the child is, that the perinæal structures are spread out, the area of the perinæum increased to a very remarkable extent; so that, when the head is just about to emerge, and the vaginal outlet is stretched to the utmost, the surface offered by the perinæum exceeds by many square inches the area presented when the parts are at rest. The increase in size takes place from side to side quite as much as from before backwards. Now, in reflecting carefully on the matter, it will at once be seen that the distension required is chiefly at the vaginal outlet itself, and in a circular direction. My meaning will be rendered more intelligible by reference to the accompanying drawing.

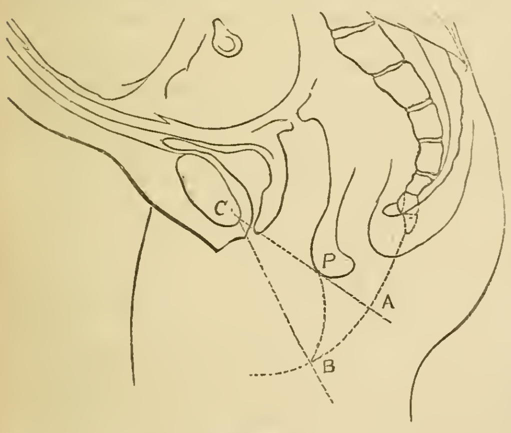

Fig. 2.

P represents the section of the perinæum when at rest, and before labour has commenced. When labour has so far advanced that the head begins to press on the perinæum, and to enlarge the inferior outlet, the result will be that the point P will travel backwards towards the point A; but, inasmuch as the stretching and distension which takes place, by driving the borders of the outlet forwards, lengthens the perinæum also in the direction from before backwards, the result of the two operations will be that the point P will travel, not directly backwards towards A, but more nearly downwards and forwards; that is to say, in the direction from P towards B. The modern practice is to push the soft parts forwards, and thus, it is said, "relax them"; and it appears to be considered by recent authorities that an advantage is thus gained—that the soft parts *are* relaxed by the pressure and "support" thus applied. But what advantage can be gained by pushing the fourchette forwards in the direction of the line A B, which is the practice recommended? It is evidently impossible to procure more space at C B than at C A; the farther the point P travels forwards, the greater must be the distension in the direction of the line A B. Now, if the dilatability of the perinæum is expended in this latter direction, it is so much lost without purpose. Pressing the fourchette forwards certainly *delays* the emergence of the head through the ostium vaginæ; the mistake has been in supposing that anything is gained by this as regards *facility* in the delivery. On the other hand, it is unquestionable that delay obtained in this manner is attended with the great disadvantage now enunciated—that, by pushing the soft parts forwards, the substance of the perinæum is expended, so to speak, in a useless manner. Sooner or later, the vaginal outlet must be sufficiently dilated to allow the head to pass. Whether the head is allowed to pass at the point C A or at the point C B, the size of the aperture required for its passage is the same.

What would be thought of an individual who, desirous of enlarging the aperture of a bag, set about the accomplishment of his purpose by endeavouring to lengthen the bag itself? The practice of pressing the soft parts of the perinæum forwards is nothing more nor less than the application of this principle. In the case of the bag, such a procedure would be only useless; in the case of the perinæum, it is worse than useless. It is by circular dilatation of the vaginal outlet that the delivery is finally accomplished. The only effect of pushing the soft parts forward is to divert the elastic properties of the perinæal structures from their natural to an unnatural and useless end. True it is that, in a natural labour, the soft parts *are* pushed forwards; that the fourchette advances in the direction of the line A B (Fig. 2); but it does not follow that dilatation in this direction is mechanically useful. It is a positive disadvantage that it should occur to any considerable extent.

How it came to be imagined that pressing the fourchette forwards was an advantage, it is not easy to explain; and the very fact that so many recent writers appear to agree in considering it an advantage shows how little the matter has been really studied by them. Curiously enough, Hamilton, the first teacher who systematically "supported" the perinæum, did not fall into this error. The hand should be applied, says Hamilton, "as the head advances, to regulate its progress by pressing the perinæum as it were backwards, in a direction towards the coccyx." (Leishman, *op. cit.*) Hamilton thus conceived that, in order to save the perinæum from laceration, we ought to press the perinæum *backwards.* With a similar object, the modern authorities say "press it *forwards*". There can be no doubt that, in regard to the economical distribution of the soft parts, Hamilton's plan is more in accordance with the mechanical requirements of the case, as I have indeed just shown. Dr. Leishman gives us a quotation from Rœderer, from which it appears that Rœderer's practice was to press the perinæum "towards the sacrum"; as I find in the original, "Sub quovis ingruente dolore digitis his perinæum versus os sacrum premit." (*El. Art. Obst.*, § 311.) It is thus evident that neither Rœderer nor Hamilton supposed it an advantage to press the perinæum forwards. Thus the argument for supporting the perinæum, "that the soft parts are relaxed by pressing them forwards", turns out to have no foundation.

Thus far, the object I have had in view has been to show, from an appeal to the facts of the case, the mechanism of the process—in fact, what the effects of the operation "supporting the perinæum" really are. It has been shown that, in the main, the reasoning on which it is, or has been, supposed that the operation is good as regards its conservative action on the perinæum, is inadmissible; that effects have been supposed to result from it which have no substantial existence; and that, in certain cases, the real effects of the operation are precisely opposite to those which are attributed to it.

I have preferred, in endeavouring to analyse the effect of the operation, to meet its defenders on their own ground, and have considered its supposed advantages in the order in which they have presented themselves; and for this reason the method of treating the subject may have appeared somewhat irregular, and wanting in order of arrangement.

The manner in which the dilatation of the perinæal structures takes place, its direction and nature, have been alluded to; and the errors of prevailing notions regarding the same have been pointed out. But the *agency* of the dilatation in question—the force by means of which the perinæal surface, previously so small, is so increased and extended as to allow the head of the child to pass—have not been considered; nor whether the plan of "supporting the perinæum" is calculated to modify, assist, or interfere with this important process.

In "making its sweep", as it is termed, over the perinæum, the portion of the head encircled by the ostium vaginæ progressively increases in circumference; the perinæum has, on every successive pain, to encounter and deal with a section of the head becoming larger and larger. Thus, whereas at the commencement of dilatation the diameter presented to the perinæum is roughly represented in Fig. 3 by the line A B, as the head advances the diameter presented to and stretching the perinæum is represented by the line A C; and, before the head can be delivered, the ostium vaginæ has to be dilated to an extent represented by the lines A D and A E. The real effect is here a little exaggerated, owing to the circumstance that the point A is not a fixed point, this part of the occipital region also advancing, although very slowly, beneath the pubic arch. The head is thus brought into contact with the perinæum in such a manner as to produce dilatation of its structures in all directions. Just as every portion of the superficies of a hollow India-rubber ball is acted upon and contributes its quota to the distension produced on forcibly blowing air into it, so is every portion of the perinæal surface stretched and made to contribute to the extension of surface necessary.

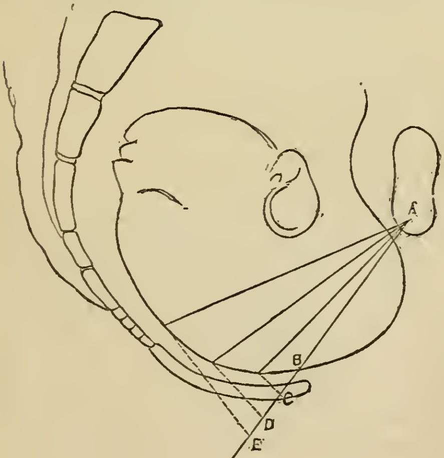

Fig. 3.

The process by which complete dilatation is arrived at, and which, like many others in the animal economy, is calculated in every way to excite our admiration, is generally a very gradual one, especially in a first labour. The head descends, driven downwards by the uterine contractions; and the attendant receives an intimation that the perinæum is about to undergo dilatation, in the fact that the perinæum is slightly bulged downwards during the acme of the uterine contraction. When the "pain" has gone off, the perinæal tumour has entirely vanished also. The next pain propels the perinæum downwards a little more; but the difference between the effect of two successive pains is so slight that it is hardly perceivable. To this process of alternate stretching and repose the perinæal structures are subjected for a period varying according to the peculiarities of the case—perhaps also according to the treatment pursued by the attendant; and at last the vaginal outlet is distended so as to allow the head to pass. The extreme distension of the perinæum never, normally, lasts for more than a very brief period; and, even up to the very last, alternates with a state of almost complete repose. The attendant watches anxiously, thinking each pain will be the last; but no, at the moment when the head threatens to escape the pain suddenly ceases, the head retires, leaving the perinæum apparently undistended, and the repose may be so complete that the patient actually often falls asleep. The very next pain may propel the head through the outlet.

Such is the normal process, which appears to be one of alternate attack and retreat, the attack not being more vigorous than the retreat is decided. The construction of the perinæum is such that this peculiar method of dilating its structures is the best and the most efficacious. It appears to be owing to the elasticity of these structures that the head is driven backwards into the pelvis when the uterine action ceases; and without doubt this is nature's provision for safety.

Now, what takes place when the perinæum is "supported" persistently and forcibly, and in such a way as recommended by certain authorities? If the uterus be acting feebly, such support may render the attempts on the part of nature to dilate the perinæal structures futile, or may so impede the action of these efforts as to postpone the delivery for a considerable time. In the case of a "rigid perinæum", as it is called, what we require is that it should be distended. How is this to be accomplished, if the means nature has provided to this end are rendered nugatory? How can the structures be properly stretched, if every uterine contraction is opposed by the operator's hand forcibly placed against the perinæum? If the uterine pains be violent, they will, in spite of the operator, drive the head downwards; if they are weak, the labour will be rendered tedious by the interference of the "support". The majority of authorities do not recommend the "support" to be carried to such a degree as to interfere materially with the distensive action of the head on the perinæal structures; and, so far as this part of the question is concerned, the slight support they recommend probably does very little harm or good.

When the "support" is in degree such that the formation of the perinæal tumour is actually interfered with, the labour is not merely rendered tedious. The support assiduously rendered has, we will suppose, prevented any great distension of the perinæum, and at the last, consequently, when the head emerges, it is distended to this extent for *the first time;* whereas, in the absence of assistance, the same degree of dilatation—practically the same, at least—would have been produced three, four, or more times, in as many pains, before the final expulsion of the head.

Dr. Leishman, who believes that support of the perinæum is one of the causes of its laceration, takes a line of argument somewhat analogous to the one just stated. "The pressure of the hand being chiefly directed against the posterior and middle portions of the perinæum, not only subjects a part already on the stretch to an injurious amount of pressure, but prevents the lateral portions of the perinæum from bearing their due share of the tension. Labour advances, and the time has arrived when the head must complete the curve of Carus and pass under the pubic arch. The whole perinæum is now on the stretch, but the lateral portions having been prevented from undergoing that beautifully graduated dilatation which nature alone effects, do not yield sufficiently" (*loc. cit.* p. 417).

From this appeal to the mechanism of the process of distension of the perinæum and of the vaginal outlet, it must be concluded that the systematic application of pressure may have the effect of interfering with the necessary dilatation of the soft parts, so to interfere with the dilatation must be to imperil the safety of the perinæum.

In the next place, I propose to look at the question from another point of view, and to consider the *causes of laceration of the perinæum during labour.*

[*To be continued.*]

Functions of the Spleen. Professor Maggiorani, of Rome, considers that he has discovered the uses of the spleen: 1. The formation of fat during the fermentation of sugar, and its conversion into glycerine and fatty acid; 2. A modification in the blood of rabbits deprived of their spleens during six months. The chief modification consists in a diminished intensity of colour, and relative poverty in iron. Hence the spleen presides over the metamorphosis of organic matter, and accumulates iron for the making of hematine.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

METROPOLITAN FREE HOSPITAL.

LARGE CARBUNCULAR BOIL FOLLOWED BY PLEURISY AND BY PYÆMIC ABSCESSES: RECOVERY.

Under the care of Jonathan Hutchinson, Esq.

William D., aged 23, a cabinet-maker of temperate habits and usually in fair health, was admitted into the Metropolitan Free Hospital, on December 26th. The disease for which he applied was a large carbuncular boil on the nape of the neck. The cellular tissue of the neck was extensively indurated, and in a brawny condition. The boil had commenced ten days ago, and it had been preceded by giddiness, lassitude, and constipation. On several previous occasions during the last two years he had had a few small boils. The discharge from the boil, which was already open, was of thick greenish pus, not at all like the "chalk and water" discharge from carbuncle. The acid nitrate having been freely applied to the ulcerated part, the man was ordered to take fifteen grains of chlorate of potash three times a day, and an alterative aperient at night.

On December 27th, the swelling about the neck was so much extended that the trachea was compressed. All the parts except in the median line in front were hard and brawny. His breathing was with a loud laryngeal rhonchus. At 10 p.m. his condition was one of extreme urgency. The dyspnœa was so great that tracheotomy was contemplated. During the day he had repeatedly been delirious; and he now appeared stupid and heavy. The swelling of the neck was such that he could not open his mouth, but by examination with the finger it was ascertained that the left side of the pharynx was much swollen. His pulse was sharp and bounding and very rapid. Respiration 96 in a minute. The induration of the parts about the back of the neck was extreme, and Mr. Hutchinson accordingly made free incisions across it. To prevent bleeding, lint dipped in turpentine was immediately afterwards placed in the tracks of the incisions. After waiting about an hour his breathing became somewhat relieved, and it was determined to defer the operation of tracheotomy for the present. The instruments were, however, kept in readiness at his bedside, in case any sudden relapse should take place. He was ordered to take half a drachm of turpentine with mucilage every four hours. On the following morning (28th) he was somewhat better; his breathing being much less frequent. During the day he managed to swallow small quantities of food. He was quite himself when awake, but passed off into wandering delirium when he fell asleep. He continued to have a succession of slight shivering fits, the first of which had occurred on the 26th. At three o'clock in the afternoon he began to complain of severe pain in his left side; and an hour or two afterwards a loud friction-sound was audible over the whole outer side of the chest. He had acute pain on pressure between the ribs. There was no dulness on percussion, He had continued the turpentine regularly, and had now taken six half-drachm doses without any inconvenience. The induration about the neck was decidedly diminishing, and the surface of the carbuncle was cleaning. A large blister was ordered to be applied to the right side, and the chlorate of potash in fifteen-grain doses was resumed in place of the turpentine.

December 29th. Somewhat better. He still has pain in the chest and the friction-sound is still present. Pulse 104. Tongue covered with white fur. He was ordered to continue the chlorate of potash.

December 30th. Still improving. Pulse 80 and soft. Friction-sound still present.

December 31st. He has had a bad night on account of pain in the back and shoulders. Two greyish ulcers have made their appearance on the sides of the tongue. Both are superficial, each of about the size of a sixpence and covered with a whitish secretion. There are no sores in other parts of the mucous membrane of the mouth; no fœtor of breath. He was ordered to suspend the chlorate of potash, and to have a large blister applied to the back.

Jan. 1. He has had a fair night, and is now beginning to take food. The tongue is in the same state as yesterday. The arms are now covered by an eruption exactly resembling urticaria, which is also scattered very sparingly on the abdomen, chest, and face. He is cheerful and has no delirium. To take the chlorate of potash in five-grain doses.

Jan. 2. Improving, though still feverish. Tongue clean; rash quite gone.

Jan. 4. He is now able to sit up a little. He can draw a long breath without the slightest pain. The rash is now quite absent, but it is reported to have come out for a short time on one arm yesterday.

Jan. 6. The ulcer on the right side of the tongue is healed, and that on the left nearly so. Some white patches which had appeared on the lower fauces have, with one exception, vanished.

After the last date, he continued in steady improvement up to the 21st, when suddenly a large purulent depôt began to form in the neck, a little to the outer side of where the carbuncle had been. On the 23rd, an incision being made into it, half a pint of greenish pus was evacuated. He was now very much troubled with profuse night-perspiration, although otherwise in tolerable health. On the 30th the abscess had quite closed, and he was steadily improving.

During February 4th, 5th, and 6th, he had an attack of intense pain in the head, which was continuous, almost without intermission. There was no very evident cause for this attack. His appetite was good, and his bowels were regularly open.

On February 16th he had general swelling about the metacarpal bone of the left forefinger with much pain. No other symptoms. He was ordered three grains of iodide of potassium three times a day. The medicine had no very decided effect, and the periosteal swelling about the fingers passed into a more chronic stage. He was now attending the hospital as an out-patient, and had resumed his work.

On May 18th, he again came to the hospital, having missed a month, during which he had taken no medicine. The metacarpal bone was now greatly swollen, and there was obscure fluctuation over it. On the left side of his head was an abscess of considerable size, evidently connected with the bone. There was also an inflamed node of two weeks' duration on the inner side of the head of his left tibia. He was at this time in fair general health, taking his food well, and strong enough to continue regularly at his work as a carpenter. The abscesses on his finger and head were opened, and in a short time healed. It should be stated that, since his recovery, almost the whole of his hair had fallen off.

Remarks. We have in the above case a very unusual and interesting sequence of morbid phenomena. The history extends over a period of about five months, and its starting point was a large carbuncular boil on the nape of a man who had previously had good health. Then followed inflammatory œdema of the whole neck, and probably of the fauces, threatening suffocation. Immediately after these symptoms was an attack of acute pleurisy; then a copious, but very transitory urticarious eruption, and two peculiar ulcers on the tongue. After the man had recovered from the acute symptoms, we have the formation of a large abscess, which developed with rapidity like that of pyæmic suppuration. Still further recovered from the first illness, we notice falling of the hair, and periosteal abscesses in connection with three different bones. Was the case one of modified pyæmia, resembling those which have been frequently noticed in connection with the acute carbuncle of the upper lip and face? In several of the latter class the occurrence of pleurisy has been noticed. Had any animal poison found its way into the man's system? The similarity of some of the symptoms to those of syphilis could not pass unnoticed, yet there was no reason to believe that they depended on that disease. Not only did the man positively deny all history of contagion, but the symptoms themselves, when closely looked at, bore no real resemblance to those of constitutional syphilis. Thus, the rash lasted but one day. The sores on the tongue were of quite peculiar aspect, and not in the least like either the condylomata or the *plâques muqueuses.* The first of the periosteal swellings occurred in connection with a bone which is very rarely affected in syphilis; and the nodes on the head and tibia were much more rapid in their progress, than those of the latter disease. The iodide of potassium, though fairly given, did not appear to exert any specific influence. Then, again, as to the remedies used in the early part of the case, were the patches on the tongue caused by the chlorate of potash? Mr. Hutchinson suggested that it was just possible that the boil might have been "poisoned" in an early stage by the application of bad tallow, tallow being a remedy in much repute amongst the poor. On the whole, he was inclined to regard the symptoms as of a pyæmic character, though differing in some particulars rather widely from what is usual in that disease. He thought that the efficacy of turpentine in subduing the original inflammatory action had been very decided.

An Academic Discussion. "At the meeting of the Academy of Medicine, New York, Feb. 20th, Dr. Kissam read an interesting account of the last illness of Dr. Francis. Dr. Sims, in some well-timed remarks upon the character of Dr. Francis, alluded to a recent conversation between Dr. Francis and Dr. Mott, at which he was present. Dr. Francis remarked that, if Dr. Mott died first, he would embalm his memory in a biography worthy of so great a subject; but added, 'If I die first, who will be my biographer?' Dr. Sims suggested Dr. Mott. Dr. Mott replied to Dr. Francis, that he had known him long and intimately, but feared his inability to do justice to his character. At the conclusion of Dr. Sim's remarks, the Academy unanimously appointed Dr. Mott the biographer of Dr. Francis." (*Amer. Med Times.*)

Troops from China. A large party of sick troops arrived on Thursday week, at Chatham from Portsmouth, where they were disembarked from the screw steam ship *Mauritius.* They left Hong-Kong on the 8th of January. The detachments consist of 117 men of all ranks, who were at the taking of Pekin. On their arrival at the invalid depôt thirty-two men were sent into Fort Pitt Hospital. Many of them are suffering from dysentery. During the voyage twelve men died in the sick berth of the ship. The following medical officers came home in the ship as passengers: Staff-Surgeon Burnwell, Assistant-Surgeons White, Morphew, W. D. Keeans, and Daniels.

Original Communications.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

V.—Operations on the Eye.

[*Continued from page 168.*]

Needle Operations for Cataract. My needle cases are not nearly so numerous as the others. I have divided them into congenital and acquired, and will begin with the description of the former, as briefly as possible.

Case ccci. F., aged 11 months. The right eye had been operated upon before, and with success; I depressed the capsule and lens, and the eye became clear. The capsule partially reappeared in the sphere of vision, but the eye improved and lost its unsteadiness.

Case cccii. F., aged 9 months. I broke up both lens through the sclerotic. At a second operation the capsule which had become opaque was depressed. She got on well for some years, and when I saw her again there was some little capsule in the pupils. This I removed by the small pointed cannula forceps, first from the right eye, and subsequently from the left. She has been able to see fairly, but there is an imperfection in her vision so that she cannot see to read.

Case ccciii. M., aged 17, a dull boy, whose parents had allowed him to grope about in blindness for this number of years, within five miles of Bristol, and in a village whence patients continually come in for advice and treatment in their eye-complaints. He had besides a cleft palate. I operated on both eyes with a needle posteriorly, and broke them up freely. He had vomiting at night. After the first day he went on well, and the pupils cleared, and he went home and was able to see to work in the fields.

I published this case in the Journal many years ago, and will now only add that it demonstrated many of the interesting phenomena of the correlation of sight and touch most satisfactorily.

Case ccciv. M. aged 8 months. I broke up both lenses completely, by needle through the posterior chambers, and in a week the left eye was clear, and the right almost so, and he was taken home with good sight.

Case cccv. F. aged 7 months. Both cataracts were well stirred up through the sclerotic, and after a short time the child apparently saw well, although some capsule remained in each pupil.

Case cccvi. M. aged 8. I operated on both eyes, and broke up the cataracts. He was excessively boisterous and noisy, and afterwards so sulky that I could only judge of him *objectively*. His eye became tolerably clear and he appeared to see better. He had an attack of inflammation in the cornea a few days after the operation.

Case cccvii. F. aged 18. She could just see enough to walk alone, but not to work. I operated on the right eye first and depressed the lens and capsule. She went on well, and had a clear pupil and good sight; *i.e.* she could see the figures on my watch without a lens. I afterwards operated in the same way on the other eye, with like success.

Case cccviii. M. aged 13 months. The mother says that at birth the child's eyes were natural, and that it could see then. I broke up both the lenses, and they became partially absorbed. An operation was subsequently performed on each eye to remove some capsule, and he now sees well.

Case cccix. F. aged 7 weeks. This was a case of great interest. The mother, a sensible woman, the wife of a man who kept a little shop, brought to me a child about 2 months old, to ask what was to be done for the eyes. I told her that a slight operation was necessary, and she went away. In a few weeks (or less) I heard that the child was dead, and I made a *post mortem* examination, and could only conclude that it had died of starvation. The mother was so distressed by my telling her that the child must undergo an operation that her breasts ceased to secrete and the child died. The next child that was born had good eyes, and this was followed by the subject of this account, a child with cataracts. I operated and broke up both the cataracts satisfactorily, and the case promised very well. About a fortnight afterwards I called, and found it was dead. It had died in its mother's arms in the night, and had evidently been accidentally suffocated. I made a *post mortem* examination. After this the woman had another seeing child, and then again one born with cataracts, which was brought to me: I advised an operation, but I never saw it again.

Case cccx. F. aged 9 months. I operated on both eyes and broke up the lenses which were glistening and brittle; and fine splinters, almost like pieces of crystal, flew off into the anterior chamber. The lenses were absorbed, and the case did well. The child sees fairly now.

Case cccxi. F., aged 33, had cataracts from childhood, but they were not very opaque, and she could see to do ordinary household work. I operated on the left eye which was least useful to her, and broke up the lens through the posterior chamber. She suffered considerable pain for two days, but afterwards she recovered well and her sight was much improved.

Case cccxii. M., aged 25, had been partially blind from birth, but he had been able to see to work as a miner, an employment well suited to such cases, and his sight had been getting much more impaired. I broke up the left lens which was absorbed and his sight much improved. On a subsequent occasion, he came up to Bristol, and I operated on the right in the same way; he went home with good sight.

Case cccxiii. F. aged 9 months. The mother said that the child had good sight for two months. I broke up both lenses freely from behind, and the case did perfectly well.

Case cccxiv. F. aged 9 months. A similar case to the last. No symptoms followed the operation, and the child recovered well.

Case cccxv. F. aged 4 months. I operated on the right eye and broke up an opaque capsule, and on the left, in which was a more dense cataract, and where a white nucleus slipped into the anterior chamber and remained there. No inflammation of any kind followed and the case did well.

Case cccxvi. F. aged 4 months, I operated on the right eye and broke up the lens, and Mr. Leonard, who assisted me, did the same with the left eye. The child cried but little, and was going on perfectly well when it was taken home into the country, many miles away from Bristol.

Case cccxvii. M. aged 4 months. An exactly similar case to the last in every respect.

Case cccxviii. F. aged 8. I had seen this patient some years before, and she had at that time merely a central capsular cataract, as it is called, but a fair amount of sight, and I advised no treatment. Afterwards the lenses became dull and the child was blind, the central spot being still very visible. I broke up the left (the worst) cataract from behind, and although I did it freely and the lens was comminuted the white spot remained *and the needle seemed to pass through it as in a shadow*. It was apparently a reflection from the deeper structures of the eye. The patient did very well, and has good sight with this eye.

In the following two cases the operation did not succeed.

Case cccxix. M., a pupil at the blind asylum, who had large wide pupils, bright inside, and dense white capsules. He saw the light. I removed the capsules with a needle; but he saw no better, being amaurotic.

Case cccxx. M., aged 15 months, a weakly child with opaque capsules and small adherent pupils. I operated with a needle on both eyes, depressing the capsule. The child had been ill and was cutting its teeth, the gums being in a state of suppuration. It died on the fifth day after the operation.

Case cccxxi. M., aged 29, a miner, who had always had cataracts, but could see to work. I operated upon one eye, with the needle, and broke up the cataract, until it seemed tolerably equally diffused through his aqueous humour. He complained much at first that his sight was worse than before the operation, but it afterwards cleared, and ultimately this eye was the best.

Thus, with the exception of the amaurotic boy from the blind asylum, and the unhealthy child which died, all my cases of operation for congenital cataract were successful.

The next series, of about forty cataract cases, contains those where the disease was not congenital, and a needle operation was performed.

Case cccxxii. M. aged 26, had undergone an operation on the right eye for cataract before I saw him, and he wished to be cured in the left eye also, in which he had had a cataract eleven years. I operated on the left eye and he was speedily cured, and saw to work well with it.

Case cccxxiii. M., aged about 25, the brother of the last case, who had had cataract in the right eye for thirteen years, and in the left a year. I broke up the cataract in the right, and he obtained excellent sight. About three years afterwards, I operated on the left eye; and when he left Bristol, his sight was improving, but was far from good in this eye, being excellent in the other. I have no further report of him.

Case cccxxiv. F., aged 28, blind in the right eye with adherent capsule and iris with opacity of the lens; in the left eye there is opaque capsule. I removed this by means of a corneal section and the cannula-forceps, and left a bright black pupil. She saw well at once, and it remained well, and she went home to be married.

Case cccxxv. F., aged 19, with cataracts of six months standing. I operated on the right eye with a curved needle through the cornea, breaking up the anterior capsule, and in the left eye I broke up the lens with the same needle through the sclerotic. He had more pain in the left than the right, but absorption went on favourably in both, and she was cured.

cccxxvi. M., aged 35. The left eye was defective in sight, and had formerly been operated on for strabismus. The right eye was injured by a piece of iron or rust some months before I saw him, and it gradually became more dim; and when the cataract was fully formed, a brown spot was visible on the capsule. I operated, and opened the capsule through the cornea, and touched the brown spot, which disappeared suddenly, and was, I have no doubt, a bit of iron adherent to the lens. Nothing more was seen of it, and he recovered, with excellent sight.

Case cccxxvii. M., aged 30, with dim vision coming on for nine years. I operated on the left eye through the cornea, and the lens became more opaque, and was afterwards absorbed, but not for some weeks. In the mean time, during my absence, a friend operated on the right eye, and the lens was absorbed, but opaque capsule occupied the pupil. This I removed with the cannula-forceps, and he obtained excellent sight in each eye.

Case cccxxviii. F., aged 21, with cataract in both eyes, of three months standing. I operated on the right eye with the short needle, known as Jacob's, and broke up the lens by a drilling motion, without disturbing it from its position; then, with an ordinary straight needle, I broke up the left cataract from behind. On the sixth day, she could see fairly with both eyes, and looked about a good deal; and on the seventh, inflammation and headache came on. This increased considerably for two days; and I gave her compound calomel pills, belladonna to be applied to the eyes, and blisters to the temple. Under this treatment, she recovered completely; and I saw her many months afterwards with excellent sight in both eyes.

Case cccxxix. M., aged 25, with fully formed cataracts in both eyes. I operated on the right with a curved needle through the cornea, and the left lens I depressed from behind. Considerable inflammation followed. He recovered with good sight; the left eye being better than the right.

Case cccxxx. M., aged 4½. He was a weak diminutive child, who had just learnt to walk; and the lenses had become opaque shortly before I saw him. I broke up both lenses from behind; and the child, who cried but little, and did not appear to feel much of the operation, evidently saw better afterwards. He went on well; and when I saw him, some months later, he had a central clear pupil and fair sight.

Case cccxxxi. M., aged 22. He had internal strabismus and cataract of the right eye, following an injury. I divided the inner rectus, and then broke up a thin biscuit-like lens with a needle through the sclerotic. A good deal of inflammation followed, and it was necessary to blister him and give mercury; under which treatment the bad symptoms subsided; and he went home with his pupil getting much clearer.

Case cccxxxii. M., aged 47, with well formed cataracts in both eyes, coming on gradually at first, but subsequently very rapidly; for he said that he could see to work at his calling (harness-making) four days before I saw him, and then he could not see to walk alone. I operated on the right eye (the most recent cataract) with a needle through the cornea, and partially broke up the anterior capsule, but the left was more efficiently done. After a few days, some inflammation came on, for which I treated him with belladonna, mercury, and blisters, and he improved and went home, but returned in three months, suffering pain. The left eye was tolerably clear, and he had fair sight; the right was inflamed from the pressure forward of the nucleus of the lens. I made a lower section, and removed the lens easily; but the operation was very painful, owing to the inflamed state of the eye. He went away with a large clear pupil and excellent sight.

Case cccxxxiii. M. aged 40. The cataract in the right eye had been successfully removed by a colleague, but the sight was imperfect. I operated on the left, breaking up the anterior capsule, and a quantity of opaque fluid flowed into the anterior chamber. I subsequently depressed a portion of the nucleus that remained, and he did very well.

Case cccxxxiv. M. aged 30, with cataract in the left eye, the result of gonorrhœal ophthalmia. He was very anxious to have the deformity removed, and I therefore broke up the lens.

Case cccxxxv. F., aged 16, with fully formed cataracts of a year's standing. I operated on both eyes with a straight needle through the posterior chamber. She had vomiting afterwards, but subsequently she went on well, and had very good sight. She was apparently much improved in intelligence soon after the sight was restored.

Case cccxxxvi. M. aged 50. Both eyes had been operated on some years before I saw him, by a surgeon in the country, and the right had suppurated, while the pupil of the left was partially obstructed. I broke up the lens again through the sclerotic, and he recovered after a short time with very good sight, able to read with a suitable glass.

Case cccxxxvii. F., aged 20, with single cataract and adherent iris of the right eye. I tried to depress the capsule, for such it proved to be, as she was anxious to be rid of the deformity, but the point of adhesion seemed to hold it. The next day the opacity was as before, but her anterior chamber was discoloured, being of a green hue, and a few small vessels were to be seen ramifying in the capsule from the adherent point; the sclerotic vessels were full. On a subsequent occasion I made a section in the cornea and with the cannula-forceps drew out the opaque capsule, leaving a clear pupil and fair sight.

A point of interest in this case is the discoloration of the anterior chamber, due to a slight effusion of blood from my dragging upon the adherent iris during the operation. A blow upon a healthy eye, a minute puncture will not unfrequently produce the same result, and the effusion of blood under the conjunctiva following the rupture of a small vessel during the strain of coughing or sneezing sometimes encroaches under the conjunctival layer of the cornea and gives rise to exactly the same appearance. A case of the latter kind is mentioned in Mr. Lawrence's work on *Disease of the Eyes* (p. 138), where the cause of discoloration was not discovered. although the patient had considerable effusion under the rest of the conjunctiva, and when he was subjected to cupping and mercurial treatment, when time alone was sufficient for the cure.

Case cccxxxviii. M., aged 26, with cataract of five years' standing, from an injury with an awl. He was anxious for an operation to get rid of the deformity. I therefore operated with a needle and broke up the lens and capsule. He complained of great pain, and was rather hysterical. The case did perfectly well.

Case cccxxxix. M. aged 11. A boy with very imperfect organs of vision, one having sloughed from purulent ophthalmia at birth, and the other being much damaged by adherent pupil, and opacity of the lens. I operated on the latter (the left) with a needle through the sclerotic. He was very sick afterwards, but went on well, and his sight was much improved.

Case cccxl. F. aged 37. This case was similar to the last. The right eye was flat and sightless. The left cornea was opaque below, and above was a large artificial pupil (made by the late Mr. Scott) blocked up by a cataract. I broke up the lens with a needle, and after the usual accompaniment of twenty-four hours' sickness, she did very well.

Case cccxli. M., aged 30, with cataract of the left eye, very opaque and white, and incipient cataract of the right. I operated on the left, through the cornea, and numerous flocculi fell forward into the anterior chamber. About a month afterwards I touched it again, and he went home with fair sight, there being a central clear hole. Two years after this he came up again, to try to get his sight improved, as he was now quite blind in the right eye. He was extremely weak and thin, and appeared phthisical. I removed the capsule of the left eye with the cannula-forceps through a small corneal section with great ease, and I then depressed and partially broke up the right lens. The case went on very badly; vomiting and great pain followed the operation, and his left eye suppurated entirely. The remedy that relieved him most, was quinine. He went home after a time, and the sight in the right eye was gradually getting better.

Case cccxlii. F., aged 16, with cataract in the left eye only. She was anxious to be cured of the deformity. I operated and broke up the lens completely, and some portions started forward into the anterior chamber. In seven weeks the whole of the opaque part was absorbed, and she had fair sight.

Case cccxliii. M. aged 25; unable to work in consequence of dulness in the left eye and capsular cataract in the right. I depressed and broke up the latter, and his pupil soon became quite clear. The sight in the left eye, which seemed to be very clearly in an amaurotic state, became much better by use.

Case cccxliv. M., aged 30, had met with accidents (at separate times) in both eyes; the left was punctured with a pen and the cornea became partly opaque and prominent with adherent capsule. The right had also had cataract which had been cured; but at a subsequent time a blow had destroyed his sight again. I operated on the left eye, his now only remaining chance, and broke across some of the adhesions of the capsule, and depressed it: his sight was much improved.

Case cccxlv. M., aged 49, had cataracts and prominent and opaque cornea. He could see (as is usually the case) better in the dusk or on a dull day, but could not see close objects. I depressed the right lens, and after a time it dissolved, and his sight was much improved.

Case cccxlvi. M., aged 56, with capsular opacity in the left eye, adherent pupil, opaque cornea, and tremulous cataract in the right. I operated first upon the right, and depressed the cataract. In the left I tried to remove the capsule but could not do so. His sight in the right became very good, but the left lens, in its turn, became tremulous, and I reclined it after a time, and he recovered very good sight. He could tell the time by the church clock without a glass, and with a four-inch lens sees near objects clearly.

Case cccxlvii. F. aged 52. Double cataract. I extracted the left by lower section. She was a very nervous old woman with prominent brows and sunken eyes. The operation was performed with some little difficulty, and a very dark lens removed. She went on perfectly well for a while, but inflammation came on, and she went home with a closed pupil. I, at a subsequent period, reclined the lens in the left eye, and she saw well for about twelve days, when after a severe fit of coughing she found herself blind again, but in two days the cataract fell again out of the way, and she went home with good sight.

Case cccxlviii. F. aged 27. Left eye sunken; right eye had corneal opacity, following small pox, and also cataract which had existed since she was three years old. She saw merely the light, but was very intelligent. I have published this case at length in the Journal. The patient recovered her sight at once, and all the phenomena connected with the process of learning to see and to recognise by sight what she perfectly well knew by touch, were most marked and interesting.

The few remaining cases of needle operation were either unsuccessful, or no strict record was kept of the result of the operation.

Case cccxlix. M., aged 60, with amaurosis of the left eye, and cataract with adhesion of the pupil in the right. He saw the light with both. I depressed the cataract in the right and he recovered considerable sight in it, and the left mended, on the restoration of vision to the other eye. After three months I operated again, and removed the capsule which still obstructed vision a little: inflammation followed, which was overcome by leeches and other appropriate treatment, but he had no sight in the eye, and he went home well satisfied with the improved vision of the originally amaurotic eye.

Case cccl. F., aged 38, with double cataract. I depressed the right lens, and she had good sight until the eighth day, when the lens re-ascended and the eye became inflamed; leeches, belladonna, and opium were used. I then operated on the left eye, and the same series of symptoms followed in the same order; and when she returned home the eyes were weak, but the sight was improving.

Case cccli. M., aged 21, with a hard-looking cataract in the right eye, from a blow in his childhood. I broke up the cataract more to get rid of the deformity, which interfered with his getting employment, than for the sake of restoring his sight. I operated with a needle through the sclerotic and broke up the lens easily. Pain came on, and a good deal of inflammation, and I bled him, and after that he went on fairly for a time. Leeches and belladonna were again applied, and at last the portion of lens which had fallen into the anterior chamber was absorbed, and the irritation ceased. He was well pleased with the result of his case, but his sight was very imperfect.

Case cccLII. M., aged 35, with very recent cataracts. I operated on the right lens and broke it up through the sclerotic. He saw the needle moving about in his eye. He went away with the pupil blocked up by a considerable portion of the lens. I performed, at a future time, another operation upon this eye with a needle and got rid of the rest of the lens, but his sight was not materially improved. I afterwards operated upon the left eye and broke up the lens and capsule thoroughly. The pupil was clearing when he went home, but I never heard whether he regained his sight.

Case cccLIII. M. aged 26. Had complete amaurosis in the left eye, of nine weeks standing, but had had a capsular cataract in the right for four years. I operated and depressed the lens, and his pupil remained clear, but his sight was no better. The other eye was, in the mean time, treated with mercurials, blisters, and turpentine, and when he went home his sight had improved a little but was very imperfect.

Case cccLIV. M., aged 59, had been blind four years from an injury to the left eye by a twig, which produced cataract and adherent iris, and twelve weeks before I saw him he injured his right eye in the same way. The latter lens I extracted, and the former I depressed; when he recovered, both eyes were tolerably clear but his sight was no better.

Case cccLV. M., aged 20, with opaque capsule following iritis, of four years standing, which he was anxious to get rid of, on account of the deformity, as he lost his situation as shopman in consequence of it. His eye recovered after an attack of inflammation, and he went away with a clear pupil, but very indistinct sight.

Case cccLVI. M. aged 30. The right eye was lost from corneal disease, and the left was injured by a piece of iron, producing distorted pupil and opaque lens. I broke up the lens, and his sight improved very much. At a subsequent operation, I removed a portion of capsule which still blocked up the pupil and he had good sight for six days, when suddenly a clot of blood was found filling his interior chamber, and severe inflammation followed. He was treated actively but to no purpose, and he is, I believe, at the present time quite blind.

Case cccLVII. F., aged 19, with fully formed cataract in the right eye, and very dim and myopic sight in the left. I drilled a hole in the anterior part of the lens by means of a curved needle introduced through the cornea. No symptoms of any consequence followed, and the eye became amaurotic. The other eye is in the same state and she is quite blind.

Case cccLVIII. M., aged 50, a tremulous subject with fully formed white cataracts. He had the appearance of being an intemperate man, which, however, I believe was not the case; I broke up the right lens through the cornea, and small portions fell into the anterior chamber. A severe attack of inflammation followed, and I made a section in the lower part of the cornea to get rid of the lens which seemed to irritate the eye. When he recovered from this he had very little sight, and was so weak that he could scarcely walk.

[*To be continued.*]

PUERPERAL CONVULSIONS SUCCESSFULLY TREATED BY CHLOROFORM.

By Fred. Page, M.D., Landport.

On Feb. 14, Mrs. S., a woman about 30 years of age, in every respect healthy, and naturally of a cheerful disposition, at the full period of pregnancy with her sixth child, was suddenly seized with convulsions about midday. When I saw her, she had had seven or eight severe attacks in an hour. She was lying in a state of coma, with stertorous breathing, contracted pupils, pulse full, strong, about 80. She had a severe paroxysm soon after I arrived, with violent struggling, foaming at the mouth, etc., which left her, as before, in a state of lethargic sleep.

The os uteri was intact; there was not the slightest disposition to dilate; nor was there any symptom of approaching labour. She was bled to sixteen ounces. A violent fit ensued. I then kept her under the influence of chloroform for half an hour, and waited another half an hour; no fit occurred. A turpentine enema was given; and a blister was applied to the neck.

At 6 p.m., she had had convulsions at intervals. At the moment of my entering the room, the child was expelled suddenly during a fit. The placenta followed at once, and the labour was complete. The patient was still insensible, with rapid convulsions. The enema operated well. I again used chloroform for half an hour.

10 p.m., four hours after labour. The patient was very quiet, sleeping; there had been no return of the convulsions.

Feb. 15, 8 a.m., sixteen hours after delivery. She had been in convulsions during the night. I found her at 9 p.m. much as I left her the night before, in profound sleep. She had convulsions whilst I was there. Chloroform was again given for half an hour; after which she had no attack. Sensibility gradually returned, but it was some days before she quite recovered. She and her child are now quite well. I may remark that she has not the slightest recollection of anything that happened during her illness.

Remarks. This was a case which assumed what is called the apoplectic form, in contradistinction to the hysteric, and in which much doubt has been expressed as to the propriety of exhibiting chloroform. In reviewing this case, it is evident that chloroform checked the attacks. It was used at three distinct periods: 1. Before delivery, preventing them for two hours; 2. Directly after delivery, for four or five hours; 3. Sixteen hours after delivery, when they ceased.

The first anxiety in puerperal convulsions is to empty the uterus and bowels as early as possible; but convulsions continued for twelve hours after the former had taken place. I must conclude that bleeding, the use of chloroform, and early emptying the uterus, are the grand remedies in this disease—especially chloroform. I shall be glad to hear more of its use in these cases.

New Use of Cows. The health officer of Brooklyn, New York, in relation to the prevention of small-pox, says:—"In order to relieve the minds of parents in relation to the quality of (vaccine) matter to be used upon such occasions, and also to meet the wants of the medical profession in this city in particular, I would recommend that a cow be set apart, and kept at the grounds of the almshouse or elsewhere for this especial purpose, from which fresh (vaccine) matter could always be obtained. The authorities cf Boston have for several years, in this manner, and with effect, supplied the profession in that vicinity."

Reviews and Notices.

On the Origin of Species by Means of Organic Affinity. By H. Freke, M.D. Pp. 135. Dublin: 1861.

This volume consists, in the main, of certain views of the author which were introduced into a series of papers published by him in the *Dublin Medical Press* some ten years ago. There they have been left to slumber until the appearance of Mr. Darwin's famous work again turned the author's attention to them.

> "The interest," he says, "created by Mr. Darwin's recently published work on the same question, connected with the fact of that distinguished naturalist having reached a conclusion identical with one I had myself attempted to establish, has led me to believe that the present would be a favourable opportunity for me to reproduce my own views."

Dr. Freke believes with Mr. Darwin, that all organic creation has originated from a single primordial germ. It is impossible, however, for us, without entering into details beyond the limits of our space, to give an idea of the ingenious and difficult character of the author's arguments. We will only say, that his conclusion appears to us unsatisfactory; indeed, he is, as may be observed, occasionally forced to fall upon his opinion or conviction for the basis of his argument. No one will dispute the correctness of his general statements with regard to the functions of organised bodies—of muscular or nerve fibre; but we cannot see how these facts help him to his final conclusion. He says:—

> "I hesitate not to state, in reply to this question, that to me it would appear to be opposed to all that is known of the great Creator's arrangements, *to doubt* for a moment that all the countless myriads of millions of individual organising agents, comprised under each distinct species of organising matter since the commencement of organic nature, have emanated for each distinct species from *one solitary germ of that species*. Who doubts that *all* the individuals of mankind have descended from one such germ? The number of such doubters is *few*. But *few*, too, there are who doubt the same fact with regard to all the individuals comprised respectively under each of the other species of animals. Why, then, I ask, should the *many* doubt the same fact in relation to the individuals of *distinct species of simple organising agents*. I repeat, that I hesitate not to state that I myself entertain little doubt on the question, and every new fact that unfolds itself to me in organic creation tends to confirm me in the truth of my opinion." (P. 78.)

This quotation, we think, shows clearly that the main deduction of the author chiefly reposes on his opinion. We cannot, therefore, think that he much helps Mr. Darwin's unsatisfactory conclusions.

We have as yet found (to our reason) the argument put forward by Mr. Owen an insuperable difficulty to the belief of this one-germ origin of all species—the geological argument. Geology shows us clear, definite, and distinct breaks in the character of individual creatures. Nowhere do we find any gradual bevelling off of one species into another, such as this unity-of-species-hypothesis would require. Distinctly marked species have passed away, but have left no specimens of gradual developments into other and higher species behind them. Then, again, as we have always thought, why resort to so very humiliating an hypothesis of our origin, when facts all seem to tend strongly to an opposite conclusion.

Surely, there is little difficulty in believing, that the Creating Power which breathed the breath of life into that solitary germ of Dr. Freke's invention, may have again and again breathed fresh life into matter at what time he pleased, and have imparted to it the impulse of a new growth—of a new species of animated life. The creation of different species at various times is manifestly a fact as easy of belief as the creation of one single primordial living monad, and to us, indeed, far less difficult of comprehension; because it accords with our experience and our higher aspirations, which the other conclusion does not.

Diphtheria: Its Symptoms and Treatment. By W. Jenner, M.D. Pp. 107. London: 1861.

This little volume consists of two lectures delivered by the author to his clinical class at University College Hospital; and, little as it is, it contains a great deal of valuable instruction. Dr. Jenner has had considerable personal experience of the disease as it has manifested itself in London, having seen about fifty-eight cases. Most of his cases, however, were of the severest kind, he being called in to see them in consultation—often, of course, as usual, *in extremis*—thirty-four of them, he says, were fatal cases.

This is just the hand-book for the practitioner's purposes. Without giving long details of the history and pathology, progress, etc., of the disease, the author goes straight to the main point. He tells us what we want to know, and speaks with the authority of experience.

Diphtheria, which is now the epidemic disorder of the day, presents, in Dr. Jenner's opinion, the same symptoms which it has presented in all past historical epidemics. We are very pleased to see that Dr. Jenner does not patronise the change-of-type theory of diseases. Hereon, he says:—

> "My study of the histories of epidemics and other diseases, leads me to the conclusion that diseases preserve their essential characters and natures from age to age, while the opinions of the profession respecting them and their treatment change from year to year. This change seems to be sometimes the result of the personal sway of some influential teacher—sometimes the result of real advances in pathology and treatment."

This has long been our own opinion.

The following is a summary of Dr. Jenner's views:—

Diphtheria is a general disease, having exudative inflammation of the pharyngeal membrane for its anatomical character. It attacks persons of all ages; but is most common and fatal in childhood. It is contagious; varies from sthenic febrile to typhoid febrile, but always tends to assume an asthenic type. The local disease is inflammatory, tending to the asthenic form. We have no specific remedy for its cure; and must, therefore, treat it on general principles. All that can be expected from topical remedies is *arrest of exudative process before it extends to the larynx*, and prevention of absorption of fœtid matters. The sole object of opening the windpipe is to prevent suffocation—thereby gaining time for the disease to run its course. Death is so frequent after tracheotomy, because the morbid secretions of the larynx and trachea, etc., are so readily drawn down into the air-cells and smaller bronchial tubes during inspiration, and because there is a mechanical impediment to expectoration, when the windpipe is open. Death from the laryngeal complication almost always occurs during the first week of the disease ; and death from asthenia during the second week. Disordered innervation sometimes accompanies diphtheria, and is generally manifest in those parts to which the par vagum is distributed. Delirium, frequent vomiting, and hæmorrhage from nose, etc., rapid and feeble pulse, and albumen in urine, are very bad signs.

As we have hinted, the book is throughout eminently practical ; so that to detail the author's practice and views would be to transcribe the whole book. We may, however, say one word about local treatment.

Dr. Jenner, we are glad to see, has no taste for those extraordinary and repeated local causticings, of which we read too often. A single *efficient* application, by a camel-hair brush, of a solution of one scruple of nitrate of silver in a drachm of water, he believes, frequently stays the spread of the exudation ; but that equal parts of water and hydrochloric acid more frequently attain the object.

With regard to tracheotomy, Dr. Jenner is satisfied that lives are sometimes saved by it ; and rightly and reasonably enough concludes that, if tracheotomy saves only a few lives, we should still very properly resort to it on proper occasions. He also discusses the question why tracheotomy is more successful in France than it is in England ; but we must here venture to think that he argues upon a mere supposition—a statement which is not yet proved. We well know that in France tracheotomy is an every day affair ; and that in England it is shunned after what has always appeared to us a very unreasonable fashion. Dr. Jenner says he has seen many cases in which children were operated on before they were worn out by the disease ; but he does not tell us how many. Trousseau and his countrymen can base their statistical experience of tracheotomy on hundreds of cases, whilst no practitioner in this country can probably base his on as many tens of cases—how then is it possible to draw any fair comparison as to the results ? We candidly confess that Dr. Jenner has disappointed us on this matter of tracheotomy ; and that he has resorted to a most curious hypothesis to explain what we cannot accept as anything but an assumption. He thinks, that the cause of the greater frequency of death in older children in England after tracheotomy depends upon the "greater frequency of rickets in England, and consequently in the greater flexibility of the chest-walls in proportion to the age of the children." We should be glad to learn how Dr. Jenner proves this greater frequency of rickets in English children ; our general idea of the subject would lead us to an exactly opposite conclusion. Be this as it may, we cannot admit that it is fair to draw any comparison between the results of an operation which is performed in France with extreme frequency, and in this country notoriously (as the rule at least) resorted to only *in extremis*. Our own view runs all in favour of an earlier and more frequent resort to tracheotomy in this fearfully fatal disease ; so far we agree with Dr. Jenner. But we disagree with him, because we think his conclusions as to the extra fatality of the operation are ill-based, and likely still further to discourage the operation.

TEN LECTURES INTRODUCTORY TO THE STUDY OF FEVER. By A. ANDERSON, M.D., Lecturer on the Practice of Medicine in Anderson's University, Glasgow. Pp. 180. London : 1861.

This little volume contains an excellent summary of the known facts relating to fevers. When we look back to past days, to times when we, as students, were imbibing a knowledge of the art and practice of medicine, and call to mind the kind of instruction which books and lecturers on fever in those days afforded us, we cannot help reflecting that the rising aspirants to medicine are happy in their generation. The student of this day is reaping the benefit of the revolution in medicine, which under the influence of microscopy, chemistry, pathological anatomy, and, above all, modern diagrams and modern clinical medicine, has been quietly changing the face of things during the past generation. Some thirty years ago, a plain and distinct summary of the history of fever, such as the one lying before us, could not have been produced. But now, without any profound effort, and in a short time, by a little careful application of his intellect to the matter, the student may obtain a clear idea of every known fact pertaining to the matter of fever. We can strongly recommend Dr. A. ANDERSON's volume as a very safe and pleasant guide to the student in his search for a knowledge of the ideas contained under that very comprehensive term—fever.

HINTS ON INSANITY. By JOHN MILLAR, L.R.C.P.Ed. Pp. 105. London : 1861.

The country practitioner is now and then called on for the exercise of professional knowledge in cases of mental derangement. If he have at any time devoted some of his attention to the study of insanity, he will be at no loss how to act ; but if his education have not comprised that interesting speciality he may find himself somewhat puzzled, and may commit errors of judgment in one direction or another, which a very moderate acquaintance with mental pathology might have obviated.

For men in the latter category, Mr. MILLAR's little work is well adapted. Without the least pretence to psychological refinement and elaboration, the author gives such plain common sense instructions, founded on his own observations, as will not, indeed, make his readers scientific *alienistes*, but will enable them to acquit themselves with tolerable credit when a case of mental derangement falls in their way.

What Mr. Millar appears to insist on very strongly, is the simple but important question : Whether the mental disease in any given case be of functional or of structural origin ? On the correct answer to this, in disease of the organ of the mind, as well as of other organs, must depend the prognosis and treatment.

In the filling up of certificates preparatory to the reception of persons into asylums, embarrassment often arises among those not very conversant with the subject, as to the proofs of insanity which are required to be given. On this point, the author offers some instructive remarks, and cites examples both to be avoided and to be followed.

The book is written in a plain, unpretending style, and is well calculated to afford useful hints to those who have not the time or the opportunity to study more elaborate treatises on medical psychology.

LETTERS FROM ABROAD, FROM A PHYSICIAN IN SEARCH OF HEALTH. By J. BULLAR, M.D. Pp. 223. London: 1860.

THESE are pleasantly written letters; and will be found light and agreeable reading for a leisure hour. When we say that they are all dated from the best traveller-trodden districts of the earth, we must infer that what is novel in them can only be the peculiar views which the writer may happen to take of any of the objects he meets with. The remarks of a sensible medical man on such topics are always worthy of note. Cairo, Alexandria, the Mediterranean, Cannes, Nice, St. Jean, Savona, Genoa, Milan, Brussels—these are the head-quarters from whence our author despatches his epistles. Being in search of health, Dr. BULLAR seems to have avoided what doctors in health, and on travel, usually have a relish for; that is, a peep at the medical institutions of the towns and cities through which they pass.

APOPHTHEGMS OF JOHN HUNTER..

[THE following "Miscellaneous Notes and Apophthegms" are taken from the first volume of the recently published *Essays and Observations* of John Hunter.]

Ambition is a species of vanity: it is wishing or aiming at something beyond its powers.

There never was a man that wanted to be a great man ever was a great man.*

Great men have endeavoured always to do some great action that seemed to tend to some great good; and the effect made them great. Wanting to be great is vanity without the power.

In the first, the person himself is not the object; or, if he be, he is only the secondary one: in the second, it is the person himself is the object, and the thing [to be done] is only the secondary.

Never take a gentleman [fine gentleman, or coxcomb, interpolates Mr. Clift] as a pupil in physic; for, depend upon it, it is not simple curiosity, it is himself that is the object of his attention; and, whatever knowledge he may acquire, is only to employ upon himself, or tease others: he becomes his own patient ever after.

Obligations rendered between equals have an equal value put upon them by both sides; and that is the value of the thing. Obligation conferred by an inferior on a superior enhances the value, not according to the value of the thing itself, but according to the superiority of him that takes it. This increases the [gift's] value in the giver's eye; while, on the other hand, the receiver only values it according to the [degree of the] giver; and even does not put the true value upon it; and not the same value that he would have put upon it if he had received it from an equal. This principle is the reason why inferiors blame so much the ingratitude of the great.

The degree of estimation in which any profession is held, becomes the standard of the estimation in which the professors hold themselves.

It is uncomfortable to be employed in anything where the employer is more interested than the employed. This is the case with physic and the law; but more with the first; for, although it is the interest of every medical gentleman to attend to his patient, yet he can seldom give that satisfaction he could wish.

Medical men are always very ready to suppose disease, but are never ready to doubt.

It is much more pardonable to fall into an error than to follow an error.

Speaking truth is no natural propensity; it is only relating occurrences that have struck our senses, and are therefore more lively in our imaginations than anything we can feign. Besides, by law or by association, we have made it bad in a man to lie, because we found it productive of evil to those that choose to speak the truth.

When a man gives up anything, he has either a weak mind, or no fertility of genius.

It requires a great deal of courage in a man to continue poor while it is in his power to get rich.+

Accusing Mr. Fox of having debauched the minds of most of the young men of fashion in this kingdom, I was answered, that he was liked by them all: I made reply, that they were similar in that respect to the women; for they could not help having a fondness for the man that had seduced them.

Mr. Burke's speeches put one in mind of a shrub full of flowers, which is pretty while viewed; but, strip it of its flowers, and it will hardly be taken notice of.

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* [No man ever was a great man who wanted to be one.] Here Hunter shows his appreciation of the "unconscious" element in true greatness.

+ [Hunter must have penned this from personal consciousness. He might have died rich, if he had devoted his powers to the growth of his own fortune, instead of to the progress of science: he preferred to die poor, and to leave to his profession and the world a museum unrivalled in its teachings of the principles of medicine and surgery.]

EXCISION OF THE KNEE was first performed in 1762 by Mr. Filkin, and it was not until 1782 that Mr. Park first published an account of his operation. He operated again in 1783, but unsuccessfully. In 1823 Sir P. Crampton excised a knee, and in 1830 Mr. Syme. In 1850 Mr. Fergusson revived the operation, which had not been performed for twenty years in Britain. In 1792 and 1811 Moreau and his son had two excisions of the knee. In Germany, Mülder operated in 1809. In 1821, Textor, of Wurzburg, began his career, and, subsequently, excised five knee-joints. "Mr. Price has collected seventy-eight additional cases" to those tabulated by Mr. Butcher, "making up the number to 160." To these cases Mr. Barwell adds six more "English cases," and also includes "the fifteen cases lately published as occurring in the practice of Dr. Heusser," Zurich, "making 181 cases;" of these, "thirty-nine died (two after amputation); twenty got well after amputation; 122 recovered—*i.e.*, 21.54 per cent. die, 11.05 per cent. require amputation (whereof 9.5 per cent. die), 67.4 recover with more or less useful limbs." (*Dublin Medical Press.*)

British Medical Journal.

SATURDAY, APRIL 13th, 1861.

THE PROPOSED AMALGAMATION OF THE MEDICAL SOCIETIES.

The Royal Medical and Chirurgical Society of London, at a special meeting on the 5th instant, adopted the following resolution :—

> “ That it is the opinion of this meeting that it would tend to the advancement of medical science, were the Royal Medical and Chirurgical, the Pathological, the Epidemiological, and the Obstetrical Societies united under one head, and these different branches of medical science carried out in corresponding sections of one Society.”

A majority of thirty-eight against twenty-five Fellows determined that such an amalgamation is desirable; and we verily believe that the Society has not since the date of its foundation arrived at a conclusion involving consequences of more importance to its vitality. The point involved in the resolution is truly a national one. It concerns the interests of medical science generally, and therefore of the public at large; and it also concerns the status of the medical profession itself before the public. We shall therefore enter as briefly as may be into the question, in order to consider the nature of the different opinions delivered at the meeting by those who warmly opposed and by those who warmly supported the resolution referred to.

It was argued that it had been long a standing reproach to the Society that it did not advance with the growth of science, and fulfil the intentions of its founders. According to the terms of its charter, the Society was established “ for the cultivation and promotion of physic and surgery”, and of the branches of science connected with them”; but, instead of carrying out this grand and expansive idea, it had subsided into a narrow-minded and limited corporation, refusing to take cognisance of matters much beyond those appertaining closely to the practice of medicine and surgery. Misinterpreting thus its proper functions, it drove away from it many of its energetic members. Instead of encouraging, as was requisite to meet the progress of knowledge, and as it was bound to do according to the intention of its founders, obstetrics, pathology, social science, ethnology, etc.—in fact, “ the branches of sciences connected with physic and surgery”—it committed the suicidal folly of actually discountenancing these branches of our art, and thus drove the special cultivators of these studies from beneath the shadow of its wings. Naturally enough, under such circumstances, and in self-defence, new societies sprang to life, and they have grown with a vigour of itself proof enough of the necessity of their existence, and thoroughly condemnatory of the selfish conduct of the parent society.

Now, at length taught by such experience, the Medical and Chirurgical Society confesses its fault and its previous shortcomings; and, to prevent further separation and progress in that disunion which is necessarily weakness, it calls upon the various aforesaid societies to lay aside all petty jealousies, all small personal interests, to forgive the slights once offered them, and to combine in the formation of one grand national medical society, wherein every branch of medical science may have its proper hearing, and whose utterance on all matters touching medicine shall go forth to the country with the weight of the highest authority. Such a combined authority, properly exercised, as is truly argued, would give the profession a standing before the public which it has never yet possessed. Hitherto the Society has done nothing in this sense for the profession. It has merely received opinions, tied them up with red tape, and put them, without any kind of endorsement, in the pigeon-hole of its *Transactions*. It has judged them not.

On matters of daily interest to the whole community, requiring an immediate answer—*e. g.*, the mode of recovery from suspended animation from drowning, the use of the Turkish bath, quarantine, etc.—the oracle is dumb. With an equanimity and self-sacrifice which would be admirable if it were not culpable and deplorable, it sees the very bread taken out of its mouth. Public health, forsooth, is not the right concern of doctors’ attentions ! Great matters of hygiene, affecting the welfare of every individual in the country, are not proper subjects for doctors to discuss and settle ! And so they are dismissed, and seized upon by other societies. Half the business of the Social Science Association is in this way occupied with the public health ; half its food is the neglected and yet proper nourishment of the Royal Medical and Chirurgical Society ! The Society will dwell with intense interest on some novel cure for the incurvation of a toe-nail, but spurns from its consideration the settlement of questions of hygiene on which daily hang the lives or deaths of thousands of their countrymen ! Our business is, not how to arrest the destroying angels of fever and pestilence, but to show how best to ply our incapable art in their presence, when they have seized upon and got possession of the body human !

Then, again, if public authority, if the Government require instruction and help in any matter in which the art of medicine is concerned, where can it apply ? Nowhere is there to be found a constituted body fit to give an answer. The public authority looks in vain for help; and so, naturally enough, does government consult its private medical adviser, possibly a homœopathic distributor of medical advice, on some general point, it may be, of hygiene affecting the health of thousands of the people, and perhaps the interests of the profession. Then, indeed, we all jump up, and cry shame on authority; and thus we lose in public estimation, and thus have ourselves to thank for the want of respect so often shown to us by big men in office in high places.

Again, such a united body, it is argued, would tend immensely to the discountenancing of the thousand miserable quackeries which flourish through our disunion. It is absurd to suppose that a proposition on a point of medical science, duly signed and sealed and delivered under the authority of such a body—in fact, of the united profession—could fail to meet with general attention, if not with entire acceptance throughout the country. What is it, in fact, which makes the differences of our profession a byeword with the people, except this, that we have no high court of appeal, wherein opinions may be sifted, and put down at their real value.

Now, we are glad to say that, notwithstanding twenty-four votes were recorded against the resolution (and chiefly by the elders of the Society), there was a general feeling expressed on both sides in favour of the views we have here rapidly sketched out. The differences raised seem, in reality, rather concerned with the difficult task of practically carrying out the proposed amalgamation. Financial difficulties were suggested; but they are really beneath consideration in such a matter. We should rise above such petty matters of detail, satisfied, as we all must be, that our funds will abundantly suffice for the carrying out of such a noble idea. And all those other minor—microscopic—difficulties, really more of *personnel* than a society's difficulty, will not bear a moment's candid investigation. Truly, we may say that, looking back to the long discussion on the subject, we can scarcely call to mind one valid objection against the proposed union of forces. *The principle was, we believe, universally admitted as correct.*

The propriety of this unification becomes still more striking as the thing itself also is rendered more simple, by the fact that the members of the different special societies are in reality members of the repentant parent who is now calling them all back into her fold. If there were any force in one argument, which fell with weight, because it fell from one whose opinions are always received with attention and respect—viz., that the separation into various special societies is good for the growth of medicine and surgery—then, to be logical, we should still continue the process of division; we ought to establish oculistic, orthopædic, gastric, neurotic, pulmonic, and so forth societies. But surely such an argument falls ill at a time when such a triumphant jubilee, as we know, has been only lately shouted over the impropriety of specialities as developed in modern hospitals. What sort of a pretence can we have to go to the public and declaim against these special hospitals, if we cut ourselves up into as many special societies? Special societies, if correct, demand special hospitals, and therefore make such hospitals correct!

We verily believe that this question affects the standing of the whole profession, as we have already said; and most sincerely do we hope that the different societies now interested will meet this question in a catholic spirit. Her *lâches*, so freely admitted by the old society, should be forgotten. In a spirit of candour, and with a youthful vigour and a fresh life, she comes forward to perform her now admitted duty, late though it be. She invites her fellow-societies to join her in raising up a medical body which shall have a force and a voice throughout the country such as medicine has never yet possessed, of making of our profession a public authority. That this *will* now be done, we are thoroughly satisfied. The significant vote of the other evening clearly showed this. That the Medical and Chirurgical Society can of *itself* lay the foundation for the building is certain; but the cooperation of the other societies would at once give to the proceeding that greater power which comes from the *vis unita.*

THE WEEK.

A very important and influential meeting of our professional brethren has been held at Cork. The subjects there considered were almost all of them matters in which we in England are equally interested with our Irish brethren, as may be seen by a reference to the resolution passed at that meeting (to be found in another page). They are questions which come under the cognisance of the imperial legislature, and upon which we also are agitating at this moment. We refer to this particular fact, because it demonstrates so clearly the necessity for all of us pulling together at the same moment. A number of separate spasmodic sort of efforts usually have no avail upon the dead-lock of the governmental body, and thus the virtue of our struggles is all wasted. But a grand combined effort, made at the same moment by our united forces, could scarcely fail to make an impression on that unimpressionable body, which so rarely ever cares to do justice to our profession—and chiefly for the reason that our profession is unrepresented in it. We would suggest, therefore, to our Cork brethren whether they could not in this matter take a row in the same boat with the British Medical Association, so that we may take a long and strong pull altogether, in all these matters of such vital influence to the welfare and dignity of the profession. We will gladly do all we can to carry out such a desirable union of forces.

One of the leading and most learned judges in France speaks in the following flattering terms of medical jurisprudence and its professors:—

"Medicine calling itself legal has for some time past pretended that it has the right to impose its oracles on the jurisprudence of the country. It must be confessed that what I have seen and heard of certain medical men during my judicial career passes belief. If we are to believe them, there is not a man who is not a monomaniac. If Pascal were still living, he would have to look about him, for I know many a doctor who considers him a madman. Socrates, happily for himself, lived at an earlier age; he died with the reputation of the wisest of men; but, nevertheless, we find in more than one learned medical work that he was something like a madman, with his familiar demon. Then, again, how many consultations have I witnessed, which recall the scenes of our divine Molière! A nervous movement of the face, an ordinary twitching, a particular way of speaking, a mere gesture—in fact, things the most simple and natural—are turned into diagnostic signs, and perverted, just as were the frequent expectorations of M. de Pourceaugnac. And they expect that we judges, who hold in our hands the liberty and civil capacity of individuals, should allow great questions, upon which hang the honour of families, and the succession of property, and the dearest rights of men, to be ruled by such frivolous symptoms! I consider that legal medicine has added nothing of any use to the doctrines received in law, and that it ought to exercise no influence over them."

The Manchester Medico-Ethical Society held its eighteenth annual meeting on the 29th of January last. We are glad to see that the Society is well supported and full of life. It may not be out of place to recall here the objects of this Society. The Association was instituted to frame a code of etiquette for the guidance of its members; to decide upon all questions of usage or courtesy in conducting medical practice; to support the respectability and maintain the interests of the profession; to promote fair and honourable practice; to correspond with bodies or individuals in other parts of the kingdom on any matter touching professional interests; and by its moral influence, and the exercise of a judicious supervision, to prevent abuses in the profession. A society of this kind cannot fail to have a beneficial, though it may be a silent influence, over the members of the profession whom it embraces.

We copy the following from the *American Medical Times:* another example, we suppose, it must be considered, of the contagiousness of diphtheria:—

"We regret to notice in the *Boston Medical and Surgical Journal* the death of another physician, from disease of the throat, communicated by a patient. Dr. Horace W. Adams, of that city, attempted to resuscitate a patient, suddenly dying of disease of the throat, by endeavouring to inflate the lungs, by blowing into his mouth. On the second day, Dr. Adams began to complain of soreness of his throat; the symptoms rapidly grew worse; false membrane formed in abundance, and was occasionally expectorated with great difficulty. Death took place on the sixth day, in the following manner, soon after his medical attendant left him:—'About twenty minutes afterwards he suddenly had an attack of strangling, got out of bed, put his hands to his mouth, as if to remove some obstruction, and started for the door of an adjoining room. The nurse who was with him lifted him on the bed, and he immediately expired.' On *post mortem* examination, the false membrane was found covering the tonsils, fauces, extending through the glottis and trachea to the secondary bronchi. Near the rima glottidis was a small shred, loose at one extremity, which might have caused obstruction, and suddenly terminated the life of the patient. Was not tracheotomy advisable in this case, when the evidences of the formation of membrane in the larynx were established?"

The *American Medical Times* writes as follows of a real Utopia:—

"The immigration to America, since the establishment of our government, considered in any respect, whether political, social, or religious, must be regarded as the most remarkable in the history of mankind. For nearly a century, from every civilised, and from many semi-civilised nations, the drift of emigration has been to our shores. The emigrant is generally the poor, the disaffected, or the vicious, who seeks either to improve his condition, or gain a wider field for the exercise of his hitherto restrained passions. Yet from this singular admixture of races, religions, and diverse political education, there has as yet resulted only harmony, peace, prosperity, civil and religious freedom, and universal domestic happiness. The problems which these now historical facts present to the speculative are numerous, and of remarkable interest. The theoretical statesman has no precedent to determine the future complexion of our political institutions; the speculative theologian can by no process of reasoning or generalisation establish a national church; and the ethnologist is at a loss as to the final type of an American."

The following account, taken from the *American Medical Times*, of the retirement of Dr. Meigs; and the cool survey taken of the gentlemen who are entered for the race as his successor, will enlighten our readers as to how these things are managed in America.

"The most important topic prevailing in Philadelphia now that the winter session is over, is the vacancy about to occur in the Jefferson Medical College by the resignation of Dr. Charles D. Meigs. A vacancy in that institution always produces a sensation, and attracts medical aspirants from all parts of the country. A professorship in the Jefferson College gives at once an eminent position, and secures to the incumbent the highest revenue of any similar position in the country; and as the profession, as a class, have a high appreciation of the latter item, it is not to be wondered at that the competition is exciting. A real successor to the erudite and polished gentleman who is about to quit the field of his toil and triumph, is hardly to be expected. It would be indeed difficult to find another who combines with such classic learning and elegance of manner, so much that is genial, and which insures respect from and endears to those around him. His style is truly unique, yet very popular; perhaps not always sufficiently didactic, but he can for hours maintain the attention of the class on subjects wherein a routine teacher surely fails, and I have never known another obstetric teacher who was in the habit of indulging witticism before the student without tainting it with vulgarity. In Europe such positions seem to be supplied by a kind of consent by juniors who grow up alongside, and finally, when a vacancy occurs, fall naturally into the place; or the successor seems almost pre-appointed in some second in rank. Certainly there is not such a scramble as with us; but that style would not be in accordance with our democratic character, and a free run for every place is a national characteristic. Although it seems to be acknowledged that the position is to be given to a Philadelphian, yet there are some names from abroad mentioned in connexion with it. The most prominent Philadelphia names in the canvass, are Drs. E. Wilson, W. V. Keating, D. Gilbert, J. L. Ludlow, E. Wallace, and L. D. Harlow. Dr. Wilson has been a private teacher of obstetrics for many years, and succeeded the well known Dr. Warrington in his private school. He has had extensive practical opportunities, but certainly lacks the attainments of a scientific and literary character which would fit him for the post. Dr. Keating has taught obstetrics in an unimportant position; he is a gentleman of education, but has not the popularity with the profession in this city, which should be brought to the position he seeks. Dr. Gilbert exceeds the other applicants in years, and is the only one who is much known beyond the limits of the city. His name has been but recently announced for the chair, but his popularity has rapidly raised a strong feeling in his favour. He was esteemed as a teacher while in the Pennsylvania College, and appears in every view the most available candidate for the place. Dr. Ludlow is an accomplished gentleman, with a polished education. He is not much known as a teacher, although he would doubtless be well suited for the chair. Dr. Wallace is the present Demonstrator of Anatomy in the College, and is pushed for the place by a portion of the faculty, with what object, or with what fitness for it, is incomprehensible. Dr. Harlow is the present Professor of Obstetrics in the Pennsylvania College, where he is popular, and is certainly a good teacher. In these troublous times it may be supposed that the Trustees of the College will be extremely politic in their choice."

The seventy-third annual dinner of the Society for the Relief of Widows and Orphans of Medical Men in London and its Vicinity took place on Thursday week, at the Albion Tavern; T. A. Stone, Esq., President of the Society, in the chair. After the dinner, the sum of about £225 (including a donation of £50) was raised in support of the funds of the institution. The report for the year, made up to November 20th, 1860, shows that the Society then consisted of 228 life-members, and of 176 paying annual subscriptions; and that there were then receiving relief from the funds thirty-eight widows of deceased members and twenty-three children. The relief thus afforded was in the form of annuities, in the following proportions: thirteen widows at £40, and twenty-five at £35 *per annum;* nineteen children at £12, and three orphans at £25 *per annum.* Temporary assistance was also afforded in several instances. The principles on which the business of this Society is carried on are of a most commendable character; and we must say that, considering its peculiar merits, we are surprised at the small number of members on its list. The institution is one which any practitioner within the prescribed limits of its operation might join with a sound feeling of foresight and self-respect; for, by subscribing to it, he obtains (after two years) a right for his widow and children to claim assistance from it, if their income be so small as to require augmentation. Again, the judicious plan of investing the life-subscriptions and the donations in funded property, and of never permitting the capital stock to be diminished, gives the operations of the Society a reliable permanency. We take the opportunity of earnestly calling the attention of our readers residing within seven miles of the Post Office and in the county of Middlesex to the advantages offered by this excellent institution. The Secretary, Dr. Merriman, attends at the office, 53, Berners Street, on Wednesdays and Fridays, from 4 to 5 p.m., and will give every information that may be required.

We imagine that most persons who read the following announcement, will be inclined to think that a system, which leads to consequences such as are here indicated, must be somewhere very defective.

"St. Bartholomew's Hospital. At a meeting of the governors of this institution yesterday morning, Mr. Thomas Wormald, a member of the Court of Examiners of the Royal College of Surgeons, was unanimously elected full surgeon, after twenty-three years' service as assistant-surgeon, to St. Bartholomew's Hospital, in the vacancy occasioned by the resignation of Mr. E. A. Lloyd. Professor Savory succeeds to the assistant-surgeoncy."

In our last number but one, we discussed the question of hospital appointments, and there showed how very unsatisfactorily the present method of electing medical officers worked. Mr. Wormald, we find through the *Medical Directory*, took his diploma in 1824; he must, therefore, enter upon his duties as surgeon to the hospital in about the fifty-eighth year of his age. Without further comment, we recommend the fact to the calm consideration of the profession and the public.

The *Révue de Thérapeutique* says that there is an opening for a young *confrère*, even though he be married, at Hakodadi, the second city of Japan. The French missionaries resident there require a doctor to superintend a hospital which they are about to open. His religious opinions, it is added, must be conformable to the situation. Free passage out, and, if necessary, free passage back, with food and lodgings, are the terms proposed. The bait offered suggestively is a good opening for private practice, there being several Russians and an English consul there.—"For nine years," says Dr. Ledenter of Cherbourg, "I have greatly accelerated the process of accouchement by introducing into the cavity of the uterus, after rupture of the membranes, a feather soaked in some fatty matters, and leaving it there until the head of the child passes into the vagina." (*Abeille Méd.*)—The *Gazzetta del Popolo*, a Piedmontese journal, announces that a *concours* is to be held for the filling up of the office of district doctor in the commune of Monastero—400 *francs* per annum being the pay; and, a little further on, it says that a *concours* is also to be held for the election of a Forester—600 *francs* per annum, and lodging and clothes found, being the pay!—Dr. Lescarbault's planet seems of doubtful existence. The Academy says that "his observation of the passage of a planet over the disc of the sun on the 26th of March, 1859, has not been confirmed by later observations".—There is evidently something radically wrong in the French prize-giving system; year after year the richest prizes remain untouched!—In different countries, students have different ways of expressing gratitude to their admired professors. In France, they give them a banquet; in England, they give a piece of plate and ten or twelve guineas besides; in Italy, enthusiasm is exhausted in a speech; and in Spain, as we read, the respectful devotion is shown in a "magnificent serenade", such as his pupils have just given to Professor Sautero.—*L'Union Médicale* for April 6th, 1861, contains the translation of a manuscript letter of the famed Jenner. The letter is said to form part of "the rich collection of autographs of M. Feuillet de Conches". It is of date one year later than the published work of Jenner in 1798, and is said to be addressed to a physician at Vienna.—M. Philipeaux affirms, as did Mayer of Bonn more than twenty years ago, that the spleen is capable of regeneration. As proof of his statement, M. Philipeaux removed the spleen, of three albino rats, two months old, on December 24th, 1859; and on March 8th, 1861, he found the spleens reproduced of different form and size, it is true, but of perfectly normal structure.—M. Maisonneuve has removed the whole of the body of the necrosed tibia of a youth, leaving the periosteum. On the fortieth day, the lad walked about on crutches. The bone has been completely reproduced—so perfectly, says M. Maisonneuve, "that if I had not preserved the old bone, I should, as others have done, almost doubt the fact myself. The new bone exactly resembles that in the other leg. The cicatrices are the only visible signs of the consequences of the fearful operation practised. The youth can run and jump so that no eye can tell which leg has been operated on!"—M. Regnault has been elected to the section of Physics and Chemistry at the French Academy.—Professor Oppolzer has been elected *Rector Magnificus* of the University of Vienna, and, as such, under the regulations of the new constitution, has a seat in the Austrian Upper House of Parliament. The Rector is elected annually by each of the four faculties—Theology, Medicine, Arts, and Laws—in rotation.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. General.	York House, Bath.	Thur. April 25, 6.45 P.M.

Progress of Medical Science.

Treatment of Fracture of the Femur by Simple Extension. Dr. Swinburne advocates the following process:—The patient is placed in bed, and a broad, well-padded perineal belt adjusted and secured to the head of the bedstead; and no splint at all is made use of, as the powerful muscles and fascia that envelope the femur are amply competent to support and fix the bone. The pelvis being thus fixed by the perineal belt, extension is obtained by means of adhesive strips secured to the leg. The plasters are applied along the outside of the leg, descending spirally, protruding so as to form a strong loop under the sole of the foot, and then extending up on the inside of the leg. These strips are not applied one directly over the other, but at small distances apart, so as to embrace a larger surface of the leg, thus equalising the tension upon the integument. Then a number of shorter strips are applied in a manner similar to the many-tailed bandage, surrounding and securing the long plasters. A strong cord is then passed through the loop of plasters, and secured to the foot of the bedstead. The alleged advantages of this method are: its simplicity; the comparatively greater ease with which the patient can move in bed without danger of displacement; the readiness with which the fracture can at any time be examined—a special advantage in compound fractures; the ease with which cleanliness may be maintained; the freedom from interference with the circulation, and from sloughing of the heel or malleolus; and the non-production of stiffening from agglutination of the muscles to the bone or to each other. The foot may be prevented from inversion or eversion by placing a bag of sand or bran on either side, or by a strip of plaster or cloth. At first, slight extension only is required; and Dr. Swinburne says that it is not necessary to make the extension necessary for preserving the length of the limb until the provisional callus has begun to form—say fifteen days. In ten years, he had treated twenty-five cases in this way: fifteen were in private patients, and in six of these the fracture was intracapsular. Brief notes of eighteen cases are given: in one alone was there visible shortening, and in none was there any subsequent distortion of the thigh, or inversion or eversion of the foot. The average period of extension was five weeks; in most cases, union was tolerably firm at the end of three or four weeks. In the cases of intracapsular fracture, the results were "much better than could have been expected." (*Med. and Surgical Rep.*, Feb. 16th, 1861.)

Reduction of Dislocation of the Humerus by Manipulation. Professor H. H. Smith of Philadelphia, in reducing dislocations of the humerus, adopts the following method. In the axillary luxation, the humerus is elevated as much as possible, or at least to a right angle with the body, and the forearm is bent at a right angle with the arm, so that the hand presents to the patient's abdomen. The wrist being then seized with one hand, and the surgical neck of the humerus with the other, while the arm is elevated and the forearm flexed, the forearm is used as a lever, and the head of the humerus is rotated upwards, outwards, and backwards, until the palm of the patient's hand looks upwards, and a strong resistance to further rotation, caused by the tendon of the subscapularis, is felt. The elbow then being brought slowly to the side, and the humerus being kept parallel with the middle line of the axilla, the head of the humerus is rotated upwards and forwards by reversing the motion on the forearm until the palm of the hand again looks downwards. During this latter rotation the elbow is brought to the side; and the luxation is reduced with great ease. Anæsthetics are not required if the reduction be practised gently: but if the patient resist, or be very muscular, they will facilitate reduction. In luxation forwards, the elbow is to be carried as far backwards as possible, and elevated so as to throw the head of the bone into the axilla. The case is then to be treated as an original dislocation downwards. Twelve cases of dislocation induced by this means are noticed. Elevation and rotation of the head of the humerus, Professor Smith observes, is not a new suggestion, but has in various forms been alluded to by various writers, though generally as an adjuvant to other plans. It has been but seldom recognised as a simple and powerful means of treatment. (*Med. and Surg. Reporter*, Feb. 9th, 1861.)

Shortness and Compression of the Umbilical Cord. M. Devilliers concludes as follows, from his *Researches on Shortness and Compression of the Umbilical Cord*:—Shortness of the cord, accidental or natural, is one of the accidents of labour, the diagnosis of which presents the greatest uncertainty and difficulty. Almost all signs considered by authors as indicative of this accident do not apply directly to it, and are but very rarely present in practice. From a large number of observations, he proposes to demonstrate that the indicative signs of shortness of the cord are as follows:—1. A sudden diminution of the movements of the fœtus at an epoch more or less active during a large period of pregnancy, and especially towards the end, when the shortness is natural. 2. Sometimes premature uterine pains. 3. Persistent elevation of the fundus of the uterus at the time of labour in women whose pelves are well conformed, and when the child presents in a normal manner. 4. During the whole labour a tension, a sort of rigidity of the uterine walls, even during the pains, and lasting until the expulsion of the fœtus. 5. Sometimes the pain is referred to a fixed point at the fundus of the uterus at the time of its contractions. 6. The presence of an umbilical *souffle* upon one or several points of the surface of the uterus, especially after the rupture of the membranes, but only in cases of accidental shortening. 7. Frequently a slow progress of labour, with successive feebleness of the uterine contractions in cases where the shortening is very marked. 8. The terminal pains of labour well marked, and like those of the first periods. 9. Signs of suffering of the fœtus at an advanced period of labour, especially when the fœtal parts are engaged deep in the pelvis. 10. A sometimes rapid termination of labour, and preceded or accompanied by a slight hæmorrhage. The signs 1, 3, 4, 6, are the most characteristic. Their presence ought always to engage the attention of the accoucheur, so that he may be ready to interfere if necessary. The danger of natural shortness of the cord does not manifest itself except toward the last period of labour, and is rare. The danger of accidental shortening manifests itself soon, and is caused principally by the compression of the cord. This latter accident, which takes place often without shortening of the cord, is for the child a more frequent cause of danger than is generally supposed.

Therapeutic Uses of Digitalis. In a paper on this subject, published in the *Gazette Hebdomadaire*, Dr. Germaine comes to the following conclusions:—1. In spite of the opinion expressed by Sanders, which is in contradiction with all that has previously been observed, digitalis retards the frequency of the cardiac contractions. 2. Nothing demonstrates that it enfeebles the force of the contractions of the heart; while theory, physiological experience, and his own observations, prove that one of its mediate effects in cases of narrowing of the orifices of the heart is to augment the cardiac contractions, and that hence there is no danger in giving it where the energy of the heart seems diminished. 3. The frequency of the contractions of the heart, in cases of obstruction of its orifices, prevents this organ from returning to a functionally normal standard, and keeps up the disturbance of the circulation; and, digitalis having the property of diminishing the frequency of the contractions, it is not necessary to look for another mode of action to explain the amelioration which in these cases follows the administration of this article. 4. We can find nothing in the writings of authors which proves that digitalis possesses diuretic properties; and this reputation, ascribed to it by Withering, seems to have been accepted without discussion by all who have followed him. 5. It is very true that in organic affections of the heart, in which the use of digitalis produces an amelioration in the circulation, it is often followed by an abundant diuresis; but the diuresis in this case is only a mediate effect caused by a return of the circulation to a normal state. 6. All authors are unanimous in ascribing to digitalis a powerful action upon the stomach; in small doses it stimulates the appetite, but in doses sufficient to act upon the heart it produces anorexia, even nausea, and may become a cause of a dangerous dyspepsia in a great number of cases. The following final conclusions are readily deduced. Digitalis, possessing the property of diminishing the frequency of the contractions of the heart, should be employed in the affections of this organ, consisting in a narrowing in one of its orifices. It should be employed in these cases, because the frequency of the pulse opposes itself to the return of the circulation to its normal function; but we should be careful in administering it in other affections, accompanied by palpitations; it may retard improvement by producing derangement of the digestive functions. Finally, we should be careful in administering it in cases of dropsy not caused by affections of the heart. Digitalis possesses no diuretic action, and its employment under this title is dangerous, because it may, in producing dyspepsia, become an obstacle to a permanent cure, or may advance the fatal nature of the malady.

Relief of Gout by a Large Dose of Colchicum Wine Taken Accidentally. Dr. J. Bullar, of Southampton, relates a curious case in the *Edin. Med. Journal* for March. A gentleman, whose father and grandfather were gouty, had his first attack of gout at the age of 14. He subsequently went to India, and returned at the age of 25. For about ten years after this he had severe attacks of gout in the feet and hands once or twice every year. At the end of this time, he one morning took, in mistake for a black draught, two ounces of wine of colchicum. No symptoms appeared until the end of seven hours, when violent vomiting set in, and continued eight hours. It was relieved by the application of a blister to the pit of the stomach. The next day the patient was well, but weak and nervous. From this time—a period of twenty-four years—the gentleman referred to has never (except once) had a severe attack of gout. There have been only occasional redness and swelling of the foot, without pain or constitutional disturbance; and the only treatment required has been the local application of olive oil, and abstinence from stimulants. Dr. Bullar believes that the strongly marked gouty diathesis enabled the large dose of colchicum to be tolerated.

Why the Umbilical Cord Contracts. In a transverse section of the umbilical cord, it may be observed that the thick middle coat of the vessels is entirely composed of smooth muscular fibres, lying in immediate contact one with the other, and in such abundance as is scarcely to be seen in any completely-developed vessel. This peculiarity explains the extraordinarily great contractility of the umbilical vessels, which can be so readily seen in action on a large scale when mechanical stimuli are applied; when the vessels are divided with scissors or are pinched, or after the employment of electrical stimuli. Sometimes, upon the application of external stimuli, they even contract to such a degree that their canal is entirely closed, and thus after birth, even without the application of a ligature, as when, for example, the umbilical cord has been torn asunder, the bleeding may stop of itself. (Virchow's *Cellular Pathology*.)

The Endermic Method of treating disease, as practised by M. Trousseau, is worthy of attention. He removes the epidermis by means of strong ammonia: but the application requires caution; if the ammonia be too long applied, it will leave a scar. A thimble is filled to four-fifths with cotton-wool, and then a little pledget soaked in the strong liquid ammonia fills up the remaining fifth. It is then placed on the part affected and kept in contact with the skin for a greater or longer time. Two minutes suffice for its application behind the ear, three minutes on the temples, four to five on the neck. The mode of dressing the blister thus formed is the grand point. M. Trousseau never applies the salt. etc. in powder; he mixes the powder into a mortar with a drop of water, in the palm of his hand, and then spreads it on the surface from which the blistered epidermis is wiped off. He then covers the application with oil-silk to keep it moist, and with diachylon. After twelve hours, the dressing is renewed; but first the false membrane formed must be carefully removed, or absorption will not take place.

New Preparation of Arsenic and Bromine. Dr. Clemens of Frankfort recommends, in cases where Fowler's solution is indicated, a preparation made according to the following process. One part each of arsenious acid and of carbonate of potass are boiled in forty-eight parts of distilled water. The liquor is now allowed to cool, and enough distilled water is added to make up ninety-six parts, to which are added two parts of bromine. The solution is shaken several times a day for eight days, and then is left until it becomes colourless, which occurs in the course of the fourth week. It must be kept in a cool and dark place. The medium dose is three or four minims daily, well diluted in water. The use of this preparation is specially indicated in chronic skin-diseases; in many forms of secondary and tertiary syphilis; in glandular indurations and engorgements; in incipient tabes dorsalis; in convalescence from typhoid fevers; in obstinate intermittent fevers; and in intermittent neuralgia. (*Revue de Thér. Méd.-Chir.*, Mars 1.)

Chlorate of Potass in Gonorrhœa. Dr. Irwin, of the United States army, has constantly, during the last two years, used chlorate of potash in the treatment of gonorrhœa, with most satisfactory results. One drachm of the salt is dissolved in eight ounces of water; and an injection of this is given every hour for twelve hours. At the end of this time the discharge will have become changed and diminished, allowing the remedy to be gradually discontinued until the second or third day, when the disease will be generally found to have ceased. (*Med. and Surg. Reporter*, January 26th, 1861.)

Twin-Pregnancy: Single Placenta. Dr. Quackenbush presented, at the recent annual meeting of the Medical Society of the state of New York, a specimen of single placenta taken from a woman whom he had delivered of twins. The unusual points about the case were: 1. A single placenta. 2. A common envelope, a single chorion and single amnion for both children. 3. The insertion of the two umbilical cords almost together. 4. The length of each cord, which was forty-seven inches. The placenta was nine inches in length. (*Amer. Medical Times*, February 9th, 1861.)

Distilled Water of Copaiba. Dr. E. Langlebert employs a distilled water of copaiba, prepared according to the ordinary process, both for internal use and as a vehicle for substances to be injected in gonorrhœa. The dose is from five to seven ounces daily. It is borne well. For injection, he combines it with sulphate of zinc, tannic acid, tincture of catechu, etc. (*Bulletin Général de Thér.*, Mars 15, 1861.)

Treatmmnt of Elephantiasis by Compression of the Femoral Artery. M. Dufour, referring to a case of elephantiasis treated in America by ligature of the femoral artery, states that, during a practice of above forty years, he has employed compression of the vessel in five cases of the disease, with perfect success except in one case. The patients were all verging on old age, and in good circumstances: two were males, and three females. In three there were ulcers of various depth, and sloughing. In the latter cases, tonics were employed both internally and externally. (*Revue de Thér. Méd.-Chir.*, Fév. 15, 1861.)

Reports of Societies.

MEDICAL SOCIETY OF LONDON.

Monday, March 25th, 1861.

Alexander Henry, M.D., in the Chair.

ON INTESTINAL OBSTRUCTION BY BANDS.

BY JOHN GAY, ESQ.

After some preliminary remarks, in which he referred to the fact that several of the older surgeons—even as far back as Praxagoras—advocated operation in cases of internal obstruction—Mr. Gay defined the term "band" to mean a structure distinct from ordinary adhesions, and having a peculiar origin, texture, and relations. Generally there is only one such band; and never (as far as the author had been able to ascertain) more than two; he therefore applied to it the term "solitary band," in contradistinction to the filamentous bands often met with in the abdominal cavity, and which are only a variety of common plastic exudation. The solitary band is distinguished from these: 1, by size; 2, in being attached at the extremities only; 3, in having a glistening surface, as though it had a peritoneal covering; 4, in being often tubular where it stretches from one hollow viscus to another; 5, in having always some definite length. It seems as if, when the solitary band is formed, the parts have been in abnormal relation to each other; while in simple plastic exudation, the parts appear not to have been displaced.

In examining the records of well authenticated cases in which the attachments of the bands were noticed, Mr. Gay found that in a large proportion they were attached by one or both ends to the mesentery. They may be formed on this structure and have both their terminal attachments to it; but, when fixed to it by one end only, the other end may be attached to the intestine, or to a contiguous organ (as the ovary, Fallopian tube, or uterus); or it may be free. Again, when the band is attached by one end to the bowel, the other end may be connected with the mesentery, with another portion of intestine, with a neighbouring viscus, or with the parietal peritoneum. The general inference from these facts is, that one attachment at least is always to some one of the abdominal structures which are prone at some period to be the seat of serious and destructive disease; and that the bands in all probability owe their origin to some of the gravest disorders to which the abdominal viscera are liable.

However unlikely it might at first sight appear that a band of varying length—even seventeen inches—had been the result of provision for the cure of a wound or ulcer, Mr. Gay believed that such a theory of its origin was supported by facts.

1. Traumatic injuries of the bowels are frequently remedied by the formation of a band, tying the intestine at the seat of injury to the tissue which happens to be in contact with it.

2. Morbid specimens abound, shewing the connection of a band with an intestinal cicatrix, generally the result of intestinal ulcer. This has been pointed out especially by Dr. Stokes, to whose writings on the subject Mr. Gay made reference. Cases were also referred to as having been described by Mr. N. Ward, Dr. Hare, Dr. Bristowe, etc. The affections giving rise to formation of solitary bands arise: *a*. From impaction of hard bodies, such as gall-stones, plum-stones, etc., in the bowels or in certain diverticula, especially in the vermiform appendix; *b*. From the ordinary destructive diseases of the abdomen, such as mesenteric tabes; idiopathic typhlitis; typhus; catarrhal and dysenteric diarrhœa, etc.; *c*. From sloughing of portions of the intestinal cylinder in consequence of injury done by external strangulation.

3. The retention of a viscus in an abnormal position for a longer or shorter period will give rise to the production of a band, in all probability from direct or indirect injury during the period of dislocation. The most common example of this is the attachment of a portion of herniated bowel to its sac, in which it has been allowed to remain unreduced for some time. Such bands not unfrequently cause the reappearance of the hernia after repeated reductions; and may be always suspected to be present when a case assumes a very obstinate character.

The length of the solitary bands varies from a fraction of an inch to twenty inches. Short bands are always found between parts that in the normal state are in mutual juxtaposition, or nearly so: while long bands indicate that, at the time when the deposit was formed, the connected parts were in abnormal juxtaposition, but that, on the diseased part recovering its functions, the natural position was regained, and the band, as yet extensile, was forced to accommodate itself to the change by an increase in length.

These bands do not always constitute the whole of the immediately constricting agent; they may even constitute no part of it; although such agent could not have existed without them. Thus a twisted and elongated mesentery may produce constriction, through the adhesion of its bowel to some other structure. The omentum may also constitute the constricting agent, through a like attachment, in cases where this has been tied to the edge of the femoral ring. Even a portion of intestine or its diverticulum may become the immediate agent in the art of constriction. In one case a band so attached to a knuckle of intestine, that it (the knuckle) formed a ring and strangulated another portion of intestine that happened to pass through it.

The pathological conditions induced by strangulation by bands are, 1. Repletion of the bowel above the band, and collapse from absence of the usual contents below. 2. Peritonitis, with adhesion and effusion. 3. Softening, ulceration, and sloughing of the coats of the bowel, sometimes with hæmorrhage, generally in small patches, and occasionally producing the formation of a passage from one part of the intestinal cylinder to another. 4. Obstruction of the coats of the bowel by the pressure of the band. 5. Ulceration or gangrene of the band, by which, in several instances, the constricted bowel was, at the time of death, on the point of being released. 6. Thickening and stricture of the bowel at the seat of constriction. 7. In some cases, hypertrophy of the muscular coat of the bowel above the seat of constriction, and atrophy below.

In the diagnosis of obstruction from solitary bands, the evidence should be sought from—1. The antecedent history: 2. The mode of attack: 3. The sensations of the patient: 4. The physical indications: 5. Functional indications. After a survey of each of these points, the author summed up the means of diagnosis as follows:—

1. The history of the individual should point to some antecedent disease or injury equal to the production of a solitary band. 2. Pain does not of necessity follow immediately on the constriction of a portion of intestine by a band, although a portion of higher intestine be constricted and that tightly: if it be coincident with the first symptom of obstruction, the pain is local, and arises from the physical injury to the bowel: if not, it comes on sooner or later as the consequence of overdistension, or of peritonitis or its results, or of both combined. The pain is often, but not always, paroxysmal. 3. Distension is an early and prevailing sign. When the constriction involves the higher bowel, it is generally confined to a limited area around the seat of injury. Where the obstruction is lower, the distension is more general from the commencement. Dulness is a sign of uncertain value; but generally it concentrates itself, together with greater distension, towards the seat of constriction. 3. Vomiting is a prevailing symptom; and is especially characteristic of complete obstruction when it becomes fæcal. 4. The suddenness of the attack, and its not being preceded or accompanied by any indications of alteration in the prevailing state of the patient's health, is an important symptom.

The practical conclusion at which Mr. Gay arrived from his remarks was, that the present means of diagnosing internal obstruction by bands are imperfect; and that consequently many cases will escape the most careful scrutiny as to their cause. On the other hand, the indications from the cases which he had analysed and examined encourage and even authorise the surgeon, in cases presenting a certain combination of features or evidence, to advise abdominal section. These evidences should be: 1. An antecedent abdominal affection, of such severity as to lead the surgeon to believe that it might have been attended with some destructive process. 2. Suddenness of the attack, without previous visible deterioration of health. 3. Pain, first localised, then tenderness over a large area. 4. Distension, with general dulness at first, and subsequent concentration of dulness and tension towards the original seat of pain. 5. Vomiting, especially if it speedily become fæcal. Mr. Gay believed that no such conjunction of symptoms can take place without some sudden alteration in the relation of parts within the abdominal cavity; and that in most cases a bridle will be found to be either the direct or the indirect means of constricting a portion of intestine. As soon as fæcal vomiting has set in, the surgeon is, in Mr. Gay's opinion, justified in proceeding to explore the abdomen, rather than allow the patient the alternative of almost certain death. Should a band or bridle be found, some caution must be observed in its treatment. It should be divided; but if it unite two portions of hollow viscus, it may be tubular. Consequently, the two cut ends should be twisted or tied, so as to prevent the escape of the intestinal contents.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 3rd, 1861.

W. Tyler Smith, M.D., President, in the Chair.

Difficult Position of the Heads in Twin-Labour. By Timothy Pollock, M.D. Mrs. ——, aged 25, in her first pregnancy, and at her full time, was seized with labour pains at two o'clock a.m. on the 21st of February. At ten o'clock p.m. the os uteri was sufficiently dilated, and the presenting part—the breech—low enough to allow of the lower extremities being brought down. In using the necessary force to extract the trunk and head, an unusual elastic resistance was felt. Between eleven and twelve o'clock p.m. the trunk was delivered with a head, which proved to be that of another child. On making an examination, the lower jaw of one child was found lying across the lower jaw of the other, and both completely locked. Thus the head of the first child dragged down the head of the second, and the head of the second held back that of the first, and produced that peculiar elastic resistance which was experienced in effecting the delivery of the first child. The labour was completed a few minutes before twelve p.m. Both children were dead. The mother recovered without an untoward symptom.

Presentation of the Right Shoulder and Arm; Spontaneous Evolution. By Charles Mayo, Esq. [Communicated by Dr. Druitt.] The arm presented, and it was found impossible, owing to the strong contraction of the uterus, to turn. In the absence of the medical attendant the child was expelled, evolution taking place.

ON THE INDICATIONS AND OPERATIONS FOR THE INDUCTION OF PREMATURE LABOUR, AND FOR THE ACCELERATION OF LABOUR.

BY ROBERT BARNES, M.D., F.R.C.P.

The author, in referring to the history of this operation, observed that it proved conclusively the use of an Obstetrical Society. Before the operation was adopted, a consultation of eminent men met to discuss it. Under this sanction it was practised for a time; then became almost obsolete and forgotten. The author traced the history of the various modes of inducing labour, discussing the action and merits of each. He first pointed out the essential distinction between the deliberate induction of labour and the precipitate *accouchement forcé* of the older French practitioners. The only method used for a long time was the puncture of the amniotic sac directly over the os uteri. Experience showing that the premature escape of the liquor amnii led to the frequent peril of the child from undue compression in being forced through an imperfectly dilated cervix, Hamilton substituted the separation of the membranes for a given space from the lower segment of the uterus; and Hopkins tapped the sac at a point remote from the os. Others gave ergot of rye. Merrem and Krause, in Germany, placed a flexible catheter in the uterus, leaving it there to excite pains. This plan was now adopted by Braun, of Vienna, who spoke highly of it. In 1820, Bünninghausen led the way in a series of proceedings for dilating the cervix by plugs and instruments of various kinds. In 1842, Huter proposed to expand the vagina by inflating bladders introduced in a flaccid state. Braun then introduced his caoutchouc colpeurynter. These contrivances have been followed by inflammation of the gentials and death. The application of galvanism, the irritation of the breasts, and the carbonic acid gas douche were adverted to. The carbonic acid douche to the vagina had caused sudden death in the hands of Scanzoni. In 1846, Kiwisch introduced the vaginal warm-water douche; soon afterwards Cohen, of Hamburgh, revived a proposition of Schweighauser in 1825, to inject water into the cavity of the uterus. This, the intrauterine douche, was now extensively used. The action and merits of the douche were discussed. Although easy and convenient, it was not free from objections. Dr. Guillier had related a case in which sudden death followed a vaginal douche; it being conjectured that air had passed with water through the Fallopian tubes into the peritoneum. Other fatal cases are known. The free injection of water into the uterus might detach the placenta; it might stretch the imperfectly developed uterine fibres beyond their power of reaction, causing paralysis. The author then adverted to the recent application of the caoutchouc dilator inside the os and cervix uteri for the purpose of dilating these structures. He quoted the case of Mr. Murray, and referred to the claims of Dr. Keiller and Dr. Storer. He then related two cases of placenta prævia, in which he had himself accelerated labour, successfully opening the cervix for delivery by turning by aid of water-power applied to the interior of the cervix. He also related the histories of three cases in which labour was induced and accelerated by the same method: one being a case of simple distortion of the pelvis, one of distortion complicated with cicatrized os, and one of almost complete obliteration of the cervix by cicatricial tissue. He described the instruments employed, and the advantages attending their use. The caoutchouc dilator acted gradually and gently; unlike the douche, it admitted of being applied to the exact spot where a dilating and exciting force was required; as a means of overcoming rigidity, it was more certain and efficient than any other, superseding bleeding, incisions, tartar emetic, and stretching by the hand. As an accelerator of labour, it was so perfect as to supersede altogether the *accouchement forcé*, an operation which might now be exploded. It enabled the practitioner to deliver almost at will, not only on a fixed day, but at a predetermined hour, a power that gave us control over cases of convulsions, obstinate vomiting, exhaustion from disease or hæmorrhage, much needed and not hitherto possessed. In connexion with this subject, Dr. Barnes adverted to the importance of the method described by Dr. Braxton Hicks, of turning without passing more than two fingers into the uterus, by combined internal and external manipulation. Whenever expulsive pains could not be excited, this operation enabled the practitioner to complete the delivery on the spot.

The author concluded by classifying the methods of inducing labour according to their therapeutical application. They should be divided into—A. Preparatory measures. B. Labour provocative measures. C. Labour accelerative measures. He insisted much upon this division, believing that in many cases no one method could be relied upon, but that it was desirable to proceed in regular gradation through the stages of preparation of the soft passages, the evocation of contractile energy, and the acceleration of delivery, selecting in each stage such means as were most suitable. By the judicious consecutive use of these means we had it in our power to terminate a labour with certainty within a given time, and that with a greater amount of ease and security to the mother and child than had been hitherto attained. This increased perfection of the operation justified the hope that it might be applied to the relief of emergencies and dangers, which had heretofore baffled the skill of the physician.

Mr. Baker Brown agreed with Dr. Barnes as to the little value to be placed on statistics in this subject; and thought that the well-recorded cases of individual practitioners in midwifery were of greater intrinsic worth, and therefore more reliable, than a mass of figures tabulated together to form statistical tables, often so arranged as to carry out the peculiar views of the individual compiler. He was glad to find, from the tables which the author had placed before the Society, that the most successful mode of inducing premature labour yet practised was that of puncturing the membranes. Mr. Brown had for a period of twenty-five years adopted this mode of treatment in many cases, and could not recollect the loss of a single child or mother. He had tried the injection of hot and cold water into the vagina, and had found it so uncertain and tedious as to compel him to discontinue its use. The new plan that Dr. Barnes now recommended was evidently an excellent one, and differed from Dr. Keiller's only in the use of water instead of air. He emphatically said "Dr. Keiller's," because the plan had been unjustly ascribed to Mr. Murray, who was an assistant to that gentleman. Mr. Brown was much interested in the two cases recorded by Dr. Barnes of incision of the os uteri before he could proceed to bring on premature labour. This proceeding was to be highly commended, as it was well known to every practical accoucheur that in primiparous cases the os, when rigid and unyielding, was frequently lacerated by the violent expulsive uterine efforts, and yet no harm occurred to the woman from such laceration. So self-evident was this, that some gentlemen were in the habit of dividing the os with a bistoury. Mr. Brown could bear out from his surgical experience that the proceeding could be had recourse to with safety and advantage.

Dr. **Priestley** agreed that the induction of premature labour was one of the most important innovations which had been made in midwifery. Nothing, however, showed more conclusively the difficulty and uncertainty of performing it in certain cases than the diversity of methods which had been proposed. He (Dr. Priestley) was little acquainted as yet with the method of inducing labour by caoutchouc dilators; although he knew his friend Dr. Keiller, of Edinburgh, had taken great pains in adapting them to various obstetric purposes, and he had read with interest the case described by Mr. Murray. He must, nevertheless, protest against the opinions expressed by Dr. Barnes, and endorsed by Mr. Baker Brown, concerning the value of statistics. Whatever might be the value of individual observation and experience, they formed but very limited data on which to found general conclusions; and it must be borne in mind that statistics were really nothing more than the results of personal observation by many individuals arranged and tabulated. That statistics might be abused was no valid argument against their legitimate use. It was well known that impressions made upon the mind concerning the success of any given practice were liable to be erroneous, until the account came to be cast up and the results shown in figures. In determining the safety to mother and child of the several methods of provoking labour, statistics were particularly valuable; and nothing appeared more conclusive of the advantage of one method over another than the 88 per cent. of children saved by Dr. Hamilton, who separated the membranes, but did not puncture them, as contrasted with the 45 per cent. of Dr. Merriman and the still smaller percentage of Dr. Lee, both of whom adopted the plan of puncturing the membranes. Of the various modes which had been suggested, Dr. Priestley had personally found the injection of tepid water into the cervix uteri the simplest and the best. It needed nothing more than a gum-elastic catheter adapted to a Higginson's syringe; and the operation was almost painless, in most cases easily performed, and usually brought on labour in less than twelve hours. The water so injected had been said to be liable to separate the placenta, and one case had been published in which air had entered the uterine veins during the operation and caused the death of the patient; but it must be recollected that such alarming results were extremely rare, and probably might be entirely avoided by proper precautions. One disadvantage of injecting a large quantity of water into the uterus, according to Cohen's method, until the patient complained of a feeling of distension, had not been alluded to. By distending the lower segment of the uterus and altering the ovoid form of the organ, the child was very likely to change its position and present preternaturally. Twice had Dr. Priestley witnessed this. In a case where he induced labour some time ago for Mr. Fergusson, of Notting Hill, the head distinctly presented when the water was injected, but when labour came on the child presented by the feet. Latterly he had taken the precaution to inject not more than four or six ounces of water, which was usually effective, and less likely to alter the presentation. The dilatation by caoutchouc-bags might prove serviceable in certain cases; but under ordinary circumstances he was well satisfied with the injection of warm water.

Dr. **Hall Davis** remarked that, in connexion with the Royal Maternity Charity and other institutions during many years, he had frequently been called upon, on account of various indications, to resort to the induction of premature labour, and had employed several of the methods which had been proposed. In the early part of his practice he adopted the original mode—that by the stilet, first performed in 1756 by Dr. Macaulay, the colleague of Dr. William Hunter. He (Dr. Davis) made a small aperture, so as to ensure a gradual escape of the liquor amnii. In several cases consecutively this plan was perfectly successful as to the mother, and the children also; but subsequently two cases came in succession, where the children were stillborn, which it seemed to him was due to the pressure exerted on the body of the child in the absence of the liquor amnii to defend it. Since the occurrence of those cases he had never, except where profuse hæmorrhage had been the indication, resorted to the discharge of the waters for the induction of labour as a *first* measure. It should be, he thought, a great object with obstetricians to save the bag of liquor amnii for the labour, as being Nature's providential arrangement for safely dilating the genital passages, and at the same time for defending the child from dangerous pressure. His practice now, therefore, was to preserve the waters intact, if possible. He first, if practicable, introduced the index finger gently through the os uteri, and upwards outside the membranes, as far as he could reach; he then swept around it, thus dislodging the mucous plug, and separating the membranes to a corresponding extent. He subsequently introduced a piece of soft sponge, previously oiled, as large as could be passed without much difficulty. Where the os uteri would not admit the finger, he commenced with a sponge-tent, supporting it with a piece of sponge at the top of the vaginal tube. He had found these to answer in most cases; in other instances he had resorted to the use of an elastic bougie, passed high up, about half way into the uterus, outside the membranes, previously drawing off the urine, and leaving it in for five or six hours, secured *in situ* by tapes, so far as to prevent its slipping out again. This he found to answer only in one recent case; labour came on in four hours. He had also employed, and with success, the method usually accredited to Dr. Cohen, of Hamburgh, consisting of the injection of water into the uterine cavity. The elastic tube used for the purpose of conveying the fluid to its destination should be passed up cautiously; care must be taken to avoid rupturing the membranes by too forcible injection of the water, to allow its free egress, and also to guard against the injection of air with the water, especially by keeping the end of the suction-tube well immersed in the water to be injected. As regarded the induction of labour by the ergot of rye, he (Dr. Davis) could testify that it had the effect of inducing it, but, unfortunately, the children appeared to be destroyed too frequently under its influence, He must say that he was much pleased with Dr. Barnes's paper, and with his proposal of an elastic dilator, water being the medium, as a means of dilating the os uteri, and so of inducing labour.

Dr. Tyler Smith said that, after the use of the forceps, he held the induction of premature delivery to be the most important and life-saving of all obstetric operations. He had tried most of the methods which had been proposed, and for some years he looked upon the vaginal injections of Kiwisch (which he was the first to use in this country) as far better than any other plan. For the last three or four years he had, however, used uterine injections, and had found them an improvement. He had not known of any accident from the vaginal douche, except in a patient whose case had been communicated to him, and who was placed in a cold bath during the douche. In this instance death was caused by internal congestion and hæmorrhage. The weak point of the vaginal douche was, that sometimes labour was several days or even a week before it came on. The only death which he had known to follow the uterine douche or injection occurred from puerperal fever, and was not caused by the mode of producing labour. His plan had been to inject about half a pint of warm water, of the temperature of the blood, into the uterus, through a catheter or tube passed four or five inches into the uterus. The injection of the fluid should be gentle, care being taken not to inject air. He had never known the coming on of labour to be deferred as much as twelve hours from the time of using the injection, and generally it had commenced immediately. He had never known hæmorrhage to be produced by its use. He could not join in the light estimate which had been taken of statistics. These were, in his opinion, of high value, and their collection was one of the most useful objects of the society. He regretted also to hear the light manner in which bold incisions into the cervix uteri to facilitate labour, and ruptures of this organ, had been spoken of. He thought the cervix uteri entitled to greater respect; and he should certainly feel it a grave accident if, at any time during labour, the cervix were lacerated so as to allow the head to pass through it suddenly. Any new method of inducing labour with safety and certainty would, he had no doubt, receive due attention. He should certainly try the ingenious instruments devised by Dr. Barnes, and should be very glad to find them an improvement upon the injection of the uterus. It might be necessary to caution the profession, who would no doubt try the method of Dr. Barnes, against dilating the os and cervix too suddenly, so as to incur the risk of producing contusion or rupture of the lower part of the uterus, as the amount of fluid pressure which could be brought to bear was enormous. He considered that Dr. Barnes had earned the gratitude of the society by the manner in which he had brought this most important subject before it.

Dr. Barnes, in reply, said that if it were found that out of 1000 labours in England five women died, whilst fifteen or twenty died abroad, that might justify the conclusion that English midwifery was more successful than foreign. But the moment we sought to extract pathological and therapeutical laws from the compilation of statistical tables, we were surrounded by so many complications and disturbing causes as to render any conclusions unsafe. If in his bedside observation he saw that, by puncturing the membranes too early, the child's life was imperilled by the head being driven against or through an imperfectly prepared cervix uteri, he was convinced of the error of the practice, and was in a position from which he could not be dislodged by the abstracted facts of statistical tables, which could not be subjected to cross-examination and verification. In reference to the method of inducing labour which he had brought forward, he disclaimed the idea of advocating it to the exclusion of others; he rather insisted upon the necessity of observing the three stages he had defined — preparation, provocation, acceleration; and pointed out that, by due observance of this principle, and the proper application of the caoutchouc dilator to the cervix, and the improved method of turning, the induction of labour was no longer a matter of uncertainty as to time, but one completely within our control.

EPIDEMIOLOGICAL SOCIETY.

Monday, April 8th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

This being the annual meeting of the Society, the Council Report was presented by Dr. McWilliam, and approved.

Papers. The following papers were read, viz.:—

1. Observations on a Rare and Curious Tract on Plague, by Dr. Gilbert Skeyne, Physician to King James VI. By J. N. Radcliffe, Esq.

2. On the Climatology, Topography, and Diseases of Hong Kong, and the Canton River Station. By W. R. E. Smart, M.D., Deputy Inspector-General, R.N. Hospital, Bermuda. (Read by Dr. McWilliam.)

Officers and Council. The following were elected office-bearers of the Society for the session 1861-2:—*President*—Benjamin G. Babington, M.D., F.R.S. *Vice-Presidents*—Sir B. C. Brodie, Bart; Edwin Chadwick, Esq., C.B.; Rev. Thomas Dale, M.A.; J. B. Gibson, M.D., C.B.; R. D. Grainger, Esq., F.R.S.; Sir Charles Hastings, M.D., D.C.L.; Sir John Liddell, C.B., M.D., F.R.S.; Alexander Nisbett, M.D., R.N.; John Nussey, Esq.; John Propert, Esq.; John Simon, Esq., F.R.S.; Sir Andrew Smith, M.D., F.R.S., K.C.B.; Thomas Southwood Smith, M.D.; Thomas Watson, M.D., F.R.S. *Treasurer*—Henry Mapleton, M.D. *Secretary*—J. O. McWilliam, M.D., F.R.S., C.B., R.N. *Foreign and Colonial Secretaries*—Belgium, A. Sayer, M.D.; East Indies, James Bird, M.D.; Egypt and Syria, William Camps, M.D.; France, Waller Lewis, M.B., F.G.S.; Germany and Russia, Hermann Weber, M.D., W. E. Swaine, M.D; Portugal and the Brazils, J. O. McWilliam, M.D.. F.R.S., C.B., R.N.; Sweden, Norway, Denmark, and Iceland, R. Gordon Latham, M.D., F.R.S.; West Indies and North America, G. Milroy, M.D. *Other Members of Council*—C. J. B. Aldis, M.D.; F. J. Burge, Esq.; A. Bryson, M.D., F.R.S., R.N.; W. D. Chowne, M.D.; Headlam Greenhow, M.D.; Colonel Hough; Ernest Hart, Esq.; C. F. J. Lord, Esq.; J. F. Marson, Esq.; Chas. Murchison, M.D.; E. W. Murphy, M.D.; R. Nichol, M.D.; W. Odling, M.D.; J. N. Radcliffe, Esq.; B. W. Richardson, M.D.; Burdon Sanderson, M.D.; E. C. Seaton, M.D.; Spencer Wells, Esq.

A New Patent Substitute for Butter. The patentees prepare a delicious compound as a substitute for butter, by mixing eight parts of fat, four of butter, and one of oil! The fat being first divested of strings or ligatures, is mixed with the butter and oil in a cold state, and, if desirable, salt may be added. Provisional protection only. We submit that this is an attempt at patenting a process for a disgusting adulteration of butter. The reason it was not proceeded with was, probably, that the patentees became aware of the extreme want of originality in the very nasty idea for which they obtained protection. Most cheesemongers of middling honesty have been perfectly and practically familiar for many years with a mode of manufacturing "best fresh" from "stale salt" by a process not very different from the above. (*Chemical News.*)

Correspondence.

THE DEVELOPMENT OF TAPEWORM.

Letter from W. Gillibrand, Esq.

Sir,—The Journal of the 23rd of February contains an extract from the *Deutsche Klinik* of December last, relating the mode of development of tapeworm, as demonstrated by an experiment made upon the human subject; whereby "the cysticercus cellulosæ becomes metamorphosed into the tænia solium of man."

I have delayed making any observations on the above quotation, in the hope that some more able associate would have done so. Being disappointed in this, and the experiment appearing—to me, at least—so utterly illogical and inconclusive, I beg to trouble M. Küchenmeister with the following queries:—

Firstly. Did M. Küchenmeister, previously to feeding this criminal on pork affected with cysticerci, ascertain whether the man was the subject of tapeworm at the time of the experiment?

Secondly. And if he did satisfy himself on this head, will he state the measures he employed to attain this end, so that the profession may be better enabled to judge the correctness of his deductions?

The subject, as reported, displays such a great want of philosophical precision on the part of its author, that no further comment can be required at my hands.

I am, etc., W. Gillibrand.

Blackburn, March 24th.

[The fact referred to by our correspondent is one which has long been admitted as true. Van Beneden and Siebold have both shown that in animals cysticerci are converted into tæniæ. What Küchenmeister has here done, is showing that the same thing occurs in the human body. If we remember rightly, the experiment has been successfully performed on more than one capitally punished criminal. Editor.]

ON THE SUPPORT OF THE PERINÆUM.

Sir,—I have no desire to appropriate or anticipate anything that Dr. Hewitt has written or shall write respecting this point of practice. My sole object in writing now is to assert that Dr. Ramsbotham (*Obstetric Medicine*, p. 131) and Dr. Waller (*Elements of Midwifery*, p. 51), in recommending "that the palm of the left hand be applied to the perinæum, etc.", have recommended that which will be found impossible in the class of cases where support, if ever, is most needed. I allude to those cases in which the sufferings of a patient are often so acute during a pain as to compel her to quit the right side of the bed, to struggle almost to the opposite side, and, not unfrequently, in her agony to throw herself upon her back in the middle of it; under all which circumstances, I affirm, that it will be impossible to keep the palm of the left hand in contact with the perinæum. To be brief, I would respectfully submit, in opposition to the above justly distinguished obstetricians, that up to the expulsion of the head in all cases where support may be deemed necessary, the palm of the right hand should be applied to the perinæum with the fingers in contact with its vaginal margin; because with the right hand, aided by the combined motions of the wrist, elbow, and shoulder-joints, the accoucheurs can follow every probable movement of the sufferer, and can, without inconvenience or fatigue to himself, retain his hand in this position for any reasonable time. In ordinary cases, the application of the right hand will suffice till the delivery of the child is completed; but it sometimes happens, as every accoucheur knows, that after the head is expelled, the funis is found encircling the neck of the child; in which event the accoucheur, assuming the erect posture, will experience no difficulty in applying the left palm to the perinæum for the short time required to complete the birth of the child, and can with his right hand take the usual steps to disengage the funis, where it is practicable.

Permit me, in conclusion, to say that I possess neither the inclination nor the ability to enter upon a discussion of the general question; and that, as an accoucheur, I am at present inclined to rest satisfied with the conviction that the perinæum has, during the progress of natural labour, been extensively lacerated, and may be again; and that it is my duty to do all that experience has suggested to prevent a patient from becoming the subject of so distressing an accident.

I am, etc., A Provincial Associate.

April 1861.

INTERMARRIAGE OF RELATIONS AS A CAUSE OF DEGENERACY OF THE OFFSPRING.

Letter from Edward Crossman, Esq.

Sir,—In the number of the British Medical Journal for March 16th, Mr. Gardner concludes that the *intermarriage of cousins and near relations does not tend to degenerate the offspring.* On this question I am disposed to join issue with him. The argument on which he bases his conclusions is, that, in the breeding of cattle, the coupling of near relations is found by experience to be no bar to the perpetuation of good stock. Such undoubtedly is the case; but at the same time I think it will be found that, amongst experienced breeders, the balance of opinion is in favour of avoiding near relationship, provided individuals equally perfect and well matched, but more distantly related, can be obtained.

The reason of such preference is this: that every individual has some peculiar defect, and the bad qualities as well as the good are transmitted from parent to offspring. If two animals immediately descended from one parent, or nearly related in blood, be coupled, the defect peculiar to the first parent will not only be certainly confirmed, but will in all probability be increased twofold; whereas by uniting the descendants of different individuals the defects peculiar to either side will be so far neutralised, as in the majority of instances to be scarcely perceptible.

The same argument applies with increased force to the propagation of the human race.

Every man, and every family of men, has some peculiar fault or imperfection either of mind, of body, or of both; and if two members of a family unite, both inheriting a similar failing, their children will most certainly be doubly stamped with the family defect. Not only is every man by nature imperfect, but few men become parents before they have added to their natural and hereditary imperfections by the neglect or abuse of some of the blessings of life. Many, if not all, such mental or bodily impairments are transmitted with more or less certainty to their children; and even where they do not show themselves in the first generation, they frequently break out in the second.

Many such impairments may be of trifling importance in the first parent; but, when multiplied by the union of succeeding generations, they become most direful scourges. Who can doubt that a faint trace of scrofula in a family may in this way be multiplied into a confirmed tuberculous diathesis? Is it not the same with cancer? With gout? And with all those diseases which are recognised as hereditary? Again, are not the members of particular families frequently remarkable for peculiarities of bodily form? May not such peculiarities multiplied again and again become actual deformities?

Then, as regards the mind; are not the members of almost every family remarkable for some characteristic emotion, sentiment, or propensity? The same may not be a fault; it may even be a virtue in its original form; but should union take place between the members of that family, the mental peculiarity becomes multiplied, until at length it results in positive disease. May not insanity be thus induced? Is not every emotion, sentiment, or propensity, if exalted beyond due bounds, liable to become a delusion?

Hitherto I have considered the human race as amenable to those laws which hold good in the propagation of domestic animals. But am I right in so doing? Are the cases parallel? Is it desirable to obtain corresponding results in both?

The cattle-breeder's object is, first of all, by cultivation to obtain a good breed; and then by careful coupling to perpetuate the same stock. He cultivates each particular breed for a particular purpose. One breed of cows he rears exclusively for the secretion of milk; another for the production of flesh. He knows that the most valuable cows for milking are the least so for the production of butcher's meat; he takes particular care, therefore, to separate the two breeds, and to cultivate in each only those qualities which tend towards the object desired.

The breeder of race-horses confines his attention to the qualities which produce speed. He cares not what endowments are deficient other than those which tend towards the one object in view. The breeder of cart-horses cultivates those points only which constitute strength. No one could expect the produce of the same horse and mare to fulfil the duties of the racer, the hunter, the hack, and the cart-horse.

But are the same results desirable in the reproduction of the human race? Is it not directly the contrary? Is not that man the best citizen, whose mental and bodily powers are most evenly balanced? Would the idea of maintaining through successive generations distinct breeds of statesmen, physicians, clergymen, soldiers, prize-fighters, and jockeys, be agreeable to our notions of civilisation? No! what we desire is to maintain the members of the human family as far as possible in equilibrium; to advance in the mass; to progress altogether; but to check the development in individuals of exaggerated characteristics either of mind or of body, and to banish from amongst us the seeds of damage and decay—and here, as in all other cases, we find that nature has established a law most admirably calculated to maintain the desired equilibrium. The law to which I refer is this; that individuals of either sex admire those of the opposite sex whose characteristic peculiarities both of mind and body are directly contrary to their own. Thus, men of dark complexion admire and select for their wives fair women; tall men admire short women; and *vice versâ*. And again, in respect to mental characteristics, a hot-tempered man admires a meek-spirited woman; a quiet and reserved man chooses for his wife a lively and talkative woman; while those, whose characters are not marked by the preponderance of any particular emotion or propensity, for the most part select as partners those whose tempers and dispositions are of a like even balance.

The effect of this law of nature is obvious. An exaggerated characteristic in one parent is neutralised by the antagonistic disposition of the other; and thus the equilibrium of the human race is maintained.

I am aware that many will doubt the existence of such natural law; and hosts of examples to the contrary may be brought forward. But I maintain that careful observation will prove that such law does exist; and that the happiest (in every sense of word) marriages result from the union of individuals whose characteristics are most dissimilar. That the intermarriage of relations is not always attended by injurious results, there can be no question; but such is only the case where the uniting parties do not happen to be impressed with the same hereditary imperfection, in consequence of a previous cross having neutralised the tendency.

The commonly received doctrine, which teaches that the marriage of cousins and near relations tends to degenerate the children both in body and mind, for the above reasons I believe to be sound and philosophical.

I am, etc., Edward Crossman.

Hambrook, Bristol, April 3rd, 1861.

Medical News.

Royal College of Surgeons of England. The following gentlemen passed their first or primary examinations in Anatomy and Physiology, on March 28th, and on April 2nd and 3rd:—

St. Bartholomew's Hospital.

Anstey, A. T.
Catt, C. V.
Daniel, W.
Done, J.
Dunderdale, W.
Eccles, W. S.
Edlin, E. H.
Elliot, R. L.
Fairbank, T.
Heaton, F. L.
Hughes, J. E.
Humphry, C. H.
James, J.
Jeaffreson, C.
Jones, J.
Milsome, J. R.
Pettifer, E. H.
Pilkington, T.
Robinson, H. S.
Savory, C. T.
Southam, G. T. M.
Stone, R. S.
Teare, T. M.
Thorne, R. S.
Warboys. T. S.
Werry, A.

Charing Cross Hospital.

Badcock, L. C.
Browne, E. A.
Fisher, L.

St. George's Hospital.

Hubert, T. K.
Murray, T.
Richards, H. E.
Walford, W. G.

Grosvenor Place School.

L. Davies

Guy's Hospital.

Ashforth, G. M.
Booth, L.
Clarke, J. St. T.
Cookson, A. N.
Cookson, S.
Evans, J. H.
Freeman, R. G.
Haden, E. C.
Harding, C. F.
Hawkins, R.
Hicks, H.
Holman, T.
Hutchings, H. E.
Knight, W. H.
Lamb, J.
Moore, E.
Pratt, E. H. L.
Serjeant, D. M.
Slade, R.
Smith, C.
Smith, P. H. P.
Stevenson, T.
Woodman, F.
Tanner, R.

King's College.

Becker, J. L.
Bell, H. R.
Chiappini, A. L.
Croker, J. R.
Eade, C H.
Jackson, T. C.
Martland, W.
May, L. J.
Robinson, H.
Sedgwick, H. N. M.
Warrington, F. W.
Willey, H.

London Hospital.

Carter, F.
Oliver, J. H.
Davies, W.
Newton, J. L.
Swyer, S.

St. Mary's Hospital.

Mahon, G. A. D.
Rhodes, C.

Middlesex Hospital.

Bonner, W. J.
Garneys. W.
Eagles, W.
Jones, T.
Joyce, T.
Lee, W. E.
Morgan, E.
Rix, S. B.
Rutherford, S.
Spanton, W. D.

St. Thomas's Hospital.

Adams, W.
Barrett, J. J.
Brown, F. G.
Chater, S.
Clarke, T.
Cox, A. G.
Fletcher, W. B.
Fouracre, R. P.
Jefferson, T. J.
Kempe, C. M.
Lloyd, S.
Pearce, G.
Shepheard, P. C.
Swallow, J. D.
Towne, A.
Ward, C. H.
Waterworth, C. A.

Westminster Hospital.

Averell, A.
Beadles, A.
Clarke, C.
Edis, F. P.
Kempster, W. H.
Miller, H.
Ray, R.
Smith, T. L.
Watts, H. N.
Wilson, W. S.

University College.

Bartlett, J. J. H.
Battle, A.
Bingley, W. P.
Bury, E. C.
Carter, J.
Davies, R. W.
Evans, E.
Gibson. R. E.
Griffin, W. H.
James, T. J.
Lewis, D.
Richards, W.
Roberts, J.
Rowland, J.
Saul, W.
Shillitoe, R.
Simpson, P. J.
Taylor, H.
Warr, F.

Birmingham School of Medicine.

Baker, T.
Bracey, W. A.
Davies, J.
Iliffe, T.
Roberts, W. R.
Ure, J.

Bristol School of Medicine.

Gaine, C.
Waugh, A.

Leeds School of Medicine.

Lawrence, J. D.

Manchester School of Medicine.

Bott, J.
Bradley, S. M.
Byrne, P.
Elias, D.
Moss, H.
Newbold, E. T.
Platt, R.
Rains, S.
Renshaw, J. W.
Watson, J.
Whitlam, J.

Newcastle School of Medicine.

Bootiman, J. S.
Edgar, W.
Foster, T.
Hepple, T.
McLean, H.

Sheffield School of Medicine.

Le Tall, W. J.
Morton, T. H.

York School of Medicine.

Smith, J.

Edinburgh School of Medicine.

Inman, W.

Glasgow School of Medicine.

Webb, J. W.

Calcutta School of Medicine.

Bowser, H. C.
Greene, J. A.
Kidd, H. A.

Apothecaries' Hall. On Thursday, April 4th, the following licentiates were admitted:—

Arnold, J. C., Blackburn
Evans, D. N., Denbigh
Hall, N. F., Southwick, Sussex
Humpage, B. H., Judd Street, Euston Road
Lees, J., Wolverhampton
Schofield, F., Saddleworth, near Manchester

APPOINTMENTS.

Andrew, E., M.D., appointed Demonstrator of Morbid Anatomy at St. Bartholomew's Hospital.

Ayrton, F., M.D., appointed Lecturer on Medical Jurisprudence in the Liverpool Royal Infirmary School of Medicine, in the room of Dr. Cameron, who has resigned.

Pavy, F. W., M.D., appointed Analyst for the parish of St. Luke.

Rayner, John, Esq., appointed Resident Medical Officer to the Chorlton-upon-Medlock Dispensary.

Royal Army. The following appointments have been made:—

Avent, Staff-Assistant-Surgeon N., to be Assistant-Surgeon 66th Foot, *vice* Hemphill.

Foss, Surgeon H. C., 2nd Foot, to be Surgeon-Major.

Maclean, C., M.D., late of the Madras Medical Service, to be Local Deputy Inspector-General of Hospitals, for duty at Fort Pitt

Miller, Staff-Surgeon C. M. M., M.D., to be Surgeon 6th Foot, *vice* Ivey.

Power, Staff-Assistant-Surgeon J. L., to be Assistant-Surgeon 64th Foot, *vice* Le Febure.

Robinson, Staff-Assistant-Surgeon W. C., to be Assistant-Surgeon 34th Foot, *vice* Pennington.

Seaman, Surgeon W. C., M.D., 72nd Foot, to be Surgeon-Major.

Snell, Staff-Assistant-Surgeon W., to be Staff-Surgeon.

To be Staff-Assistant-Surgeons:—

Elliot, A. F., M.D.

Harvey, C. H.

Hemphill, Assistant-Surgeon W., 66th Foot, *vice* Power.

Le Febure, Assistant-Surgeon C. E., 64th Foot, *vice* Robinson.

Long, A.

Pennington, Assistant-Surgeon F., 34th Foot, *vice* Avent.

Royal Navy. The following appointment has been made:—

Cotton, John, Esq., Surgeon (additional), to the *Fisgard*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Adams, A. M., M.D., to be Surgeon 1st Administrative Battalion Lanarkshire R.V.

Brett, E. S., Esq., to be Surgeon 1st Administrative Brigade East Riding A.V.

Cresswell, P. R., Esq., to be Assist.-Surg. 2nd Glamorganshire R.V.

Halkyard, H., Esq., to be Assistant-Surgeon 31st Lancashire R.V.

Lumb, R., Esq., to be Surgeon 1st Administrative Battalion Cumberland R.V.

Thompson, F. H., M.D., to be Surgeon 25th Lanarkshire R.V.

To be Honorary Assistant-Surgeons:—

Ballantine, J., M.D., 13th Company Ayrshire R.V.

Beaumont, T. M., Esq., 17th West Riding R.V.

Ede, C., Esq., 22nd Company Surrey R.V.

Prichard, H. L., Esq., 1st Glamorganshire R.V.

Reece, G., Esq., 1st Middlesex Light Horse Volunteer Corps.

Wade, H. T., Esq., 4th Derbyshire R.V.

BIRTH.

Thorburn. On April 7th, at Manchester, the wife of *John Thorburn, M.D., of a son.

MARRIAGE.

Beadles, Hubert, Esq., Surgeon, Elham, Kent, eldest son of *John Nathaniel Beadles, Esq., Broadway, Worcestershire, to Hannah, youngest daughter of Thomas Addington, Esq., Eaton Socon, Bedfordshire, at St. Leonard's-on-Sea, on April 4th.

DEATHS.

Broackes, William, M.D., at Sunbury, on April 7.

De Souza. On February 18th, at Maranhao, Brazil, Rosa Edith, wife of Dr. Joaquim Gomez de Souza.

Jenkins, John, M.D., late of Gosport, at Manaton Rectory, Devon, aged 72, on April 1.

Larkins. On April 8th, at Brighton, aged 4, Caroline H., daughter of Thomas E. Larkins, Esq., Staff-Surgeon, Poona, Bombay.

Macnamara. On April 4th, at Uxbridge, aged 31, Louisa Eliza, wife of George H. Macnamara, Esq., Surgeon.

Marshall, Thornton, Esq., late Surgeon 65th Regiment, at 5, Circus Road, N.W., aged 38, on April 1.

Wilding, R., Esq., Surgeon, Blackburn, on March 25.

The Riotous Students at Aberdeen. We (*Aberdeen Herald*) understand that the investigation by the Senatus of the University as to the conduct of certain students in connection with the riotous proceedings at the late installation of the Lord Rector has resulted in the suspension of the certificate for a year of one young gentleman, and the fine of £5 or suspension of certificate for a year of another.

Jacksonian Prize. At a meeting of the Council of the Royal College of Surgeons of England, on the 9th instant, the Jacksonian Prize was awarded to Mr. Henry Thompson of Wimpole Street, Cavendish Square, a Fellow of the College, and one of the surgeons of the University College Hospital, for his essay on "The Healthy and Morbid Anatomy of the Prostate Gland." This is the second occasion on which Mr. Thompson has carried off the Jacksonian Prize.

Conviction of the late Assistant-Secretary to the Royal Medical Benevolent College. At the Central Criminal Court on Monday last, Herbert Williams pleaded guilty to several indictments charging him with embezzling money, the property of the Royal Medical Benevolent College. The prisoner had been employed as assistant secretary and collector to the Royal Medical Benevolent College, and he had taken advantage of this position to keep back several sums of money which he had received on account of the institution, and he had also obtained money by means of forged receipts. Mr. Freeman, the secretary to the institution, said that he believed the entire amount was about £200. He also said that the prisoner had been connected with the college almost from its formation, and the utmost confidence was reposed in him. He received a regular salary of £100 a-year, and he was also paid commission that would amount to between £30 and £40 more. Mr. Cooper, who appeared for the prisoner, said that he was anxious to lay some facts before the Court, in mitigation of punishment; and the Recorder respited the judgment, in order to afford him an opportunity of doing so. On Tuesday, the prisoner was brought up for judgment, and was sentenced to three years penal servitude.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

[Sir,—We beg to forward you the accompanying report of the proceedings of the above Association, with a request that the same may be inserted in the British Medical Journal on the first favourable opportunity.—We are, sir, your obedients servants, Joseph Stone, Jonathan Wilson, *Hon. Secs.*—The Editor of the British Medical Journal.]

A meeting of the Committee was held on March 28th, 1861, to consider the course of action to be adopted with respect to Mr. Roberton, the senior Vice-President, who has been, in a recent case, repeatedly meeting a homœopathic practitioner.

The Honorary Secretaries submitted a letter of resignation from Mr. Roberton, of which the following is a copy.

"Brighton Place, Manchester, March 27th, 1861.

"Gentlemen,—Judging from your notice issued two days ago, I infer that the business of the Medico-Ethical Association this afternoon has reference to the circumstance of my having lately consulted with a homœopathic practitioner.

"As it happens that the motives which induced me to deviate from what has hitherto been my uniform course are peculiar, and do not properly admit of a full explanation to the Association, I deem it best, in order to save needless discussion and trouble at your meeting, to request that my name be erased from the list of members.

"Permit me at the same time to assure you that, in taking this step, my feelings of sincere respect towards those professional friends with whom I have now been for so many years associated remain unaltered.

"Believe me to remain, gentlemen,
"Your obedient servant,
"John Roberton.

"To Dr. Stone, and J. Wilson, Esq., Hon. Secretaries."

After the reading of the above letter, a very animated discussion arose as to the best mode of dealing with the question. It was then

"*Resolved*,—That the Committee cannot accept Mr. Roberton's resignation; that this meeting be adjourned to Thursday next, hoping that Mr. Roberton, while admitting his error in meeting a homœopathic practitioner in consultation, will give an assurance to the Association that it will not be repeated by him; and that such explanation, with this resolution, be forwarded to the medical journals.

"*Resolved*,—That Dr. Noble be requested to wait upon Mr. Roberton, and explain to him the feelings of the Committee as expressed at this meeting.

Adjourned Committee Meeting, April 4th, 1861. Dr. Noble reported the result of his interview with Mr. Roberton.

The Hon. Secretaries submitted a letter which they had received from Mr. Roberton, of which the following is a copy.

"Brighton Place, Manchester, April 3rd, 1861.

"Gentlemen,—I have read the resolution of the Committee you forwarded me, and am sorry that they did not take a different—more friendly course.

"It is perhaps needful for me to state that the lady, residing twelve miles off in the country, in whose case I consulted with a homœopathic surgeon, has until her recent illness been a patient of mine, though her husband and most of his connexions are attached to homœopathy. When on this occasion she was taken ill, her husband's homœopathic attendant was summoned; and it was after two days—the illness having become alarming—that I was requested to meet him in consultation. This I declined, on the plea that my doing so would violate professional etiquette. The messenger then said that the lady's brother, a surgeon residing near Birmingham, had been telegraphed for, and would arrive in the evening; on hearing which, I replied that I would cheerfully go and meet him. When I reached the house, I found the homœopathic surgeon there; and, after waiting some time for the arrival of the lady's brother, but in vain, I had to converse with the homœopath, who explained to me the nature of the case, and the treatment he had pursued.

"After some further delay, the relative not making his appearance, we saw the lady together. I wrote my prescription, and then took leave, intimating that I would see her again the next evening. The lady's brother arrived late, and left early next morning, without my having seen him. Next visit I again consulted with the homœopathic surgeon, and did so for several successive evenings.

"During three days our patient continued in imminent danger; and my reason for consenting to these consultations was partly the fear lest, by refusing, I should add to the distress of the husband—who was distracted with grief—and partly lest he and his circle might suppose me to be actuated by resentful feelings. Had I thought of my professional interests only, I should, of course, have insisted on the dismissal of the homœopathic surgeon. And I must here repeat, that my motive for the course I took was blameless—a motive of which I can never be ashamed, however much I may regret (and I do sincerely regret) that circumstances should thus have, as it were, compelled me to violate a rule of the Medico-Ethical Association.

"After this frank explanation, I doubt not the Committee will rescind their resolution of last week, and kindly accept my resignation of membership.

"Believe me to remain, gentlemen,
"Your obedient servant,
"John Roberton.

"To Dr. Stone, and J. Wilson, Esq., Hon. Secretaries."

After due deliberation by the Committee, it was

"*Resolved*,—That Mr. Roberton's letter dated April 3rd, 1861, in which he endeavours to explain his consulting with a homœopathic practitioner, is not so satisfactory to this Committee as was desirable; yet, inasmuch as it contains a frank explanation, and an avowal of sincere regret, the Committee feel that they are now enabled to accept the resignation which Mr. Roberton has again tendered.

"*Resolved*,—That, as the question of consulting with homœopathic practitioners is not limited to the Association, but is of public professional interest, the Honorary Secretaries be requested to forward a copy of the proceedings of the Association on this subject to the leading medical journals."

Joseph Stone,
Jonathan Wilson, } *Hon. Secretaries.*

Manchester, April 6th, 1861.

Vacancies. The following posts are vacant:—physician to Addenbrooke's Hospital, Cambridge, by the resignation of Dr. Fisher; house-surgeon to the General Hospital, Bristol, by the resignation of Mr. Dowling; assistant house-surgeon at the same hospital; house-surgeon to the Warrington Dispensary; resident medical officer to the Dover Hospital and Dispensary; resident surgeon to the Reading Dispensary; resident apothecary to the Middlesex Hospital; dispenser at the Salop Infirmary; inspector and surgeon to Barrington's Hospital, Limerick; medical officer to the City of Limerick Dispensary; aural surgeon to the Dispensary for Diseases of the Ear attached to the Kent County Ophthalmic Hospital, Maidstone; medical officer for the Leatherhead district, in the Epsom Union; medical officer for district No. 1, and the workhouse, Blackburn Union.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.

FRIDAY. .... Westminster Ophthalmic, 1·30 P.M.

SATURDAY.....St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal College of Physicians, 8.30 P.M.: Dr. Beale, "On the Structure and Growth of Tissues."—Medical, 8.30 P.M.: Mr. P. C. Price, "Congenital Phimosis considered as a frequent cause of Irritation of the Urinary Organs in Young Children; the importance of its Early Recognition and Removal."

TUESDAY. Pathological, 8.30 P.M.—Statistical.

WEDNESDAY. Society of Arts, 8 P.M., Mr. J. Crawford, "On Cotton Supply."

THURSDAY. Harveian, 8 P.M.: Mr. Sercombe.—Zoological.—Royal, 8.30 P.M.—Antiquarian.—Linnæan, 8 P.M.—Chemical, 8 P.M.

FRIDAY. Royal Institution.

SATURDAY. Asiatic.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—APRIL 6TH, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week....................	Boys ..1012 Girls.. 988	2000	1220
Average of corresponding weeks 1851-60		1642	1323

Barometer:
Highest (Sat.) 30.031; lowest (Sun.) 29.490; mean 29.678.

Thermometer:
Highest in sun—extremes (Sat.) 103 degrees; (Sun.) 71 degrees.
In shade—highest (Th.) 56.3 degrees; lowest (Sat.) 30.4 degrees.
Mean—43.5 degrees; difference from mean of 43 yrs.—0.9 deg.
Range—during week, 21.9 degrees; mean daily, 18.1 degrees.

Mean humidity of air (*saturation*=100), 97.

Mean direction of wind, S.W.—Rain in inches, 0.47.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—SIR: You have made some observations at page 366, in reference to the powers of the King and Queen's College of Physicians, Ireland, to confer the "Doctorate" on their Licentiates. The Attorney-General for Ireland *thinks* their charter gives them the power to confer the title of "Doctor of Physic", whilst the Solicitor-General of England, supported by Mr. Hobhouse, is clearly of opinion that their charter does not contain any such power; and, upon this opinion, the General Medical Council refuse to register them as "M.D.s". Unless, therefore, the King and Queen's College apply for a mandamus to compel registration, they tacitly admit that their charter does not give their corporation the power they have publicly asserted they possess. It would be very satisfactory to the profession if you would give a short epitome of the charters, so as to settle the point. If your correspondent's "clever letter" clears up this vexed question, you will be doing good service to the profession, and to the medical universities, to publish it. I am, etc., MEDICUS.

April 9th, 1861.

G. E. S.—An associate writes to us:—"Allow me to remark in respect of a notice in last week's JOURNAL, relating to the subscriptions—Is not the Honorary Secretary generally the person at fault, in not collecting the subscriptions? I am Honorary Secretary for the Royal Medical Benevolent College. I get all the subscriptions collected in January or February, at the latest; but I do not leave it to the subscribers to forward their contributions to me, or else I should get a miserable remittance to forward to London; but I apply to each and all, and they either cash up, or send the money afterwards."

THE APOTHECARIES' SOCIETY *v.* THE ROYAL COLLEGE OF PHYSICIANS.—The Injunction on the part of the Society of Apothecaries to restrain the Royal College of Physicians of London from creating a new order of Licentiates, was to be moved on the 12th inst. before Vice Chancellor Wood.

THE OLD ANTIQUACKERY PETITION.—The petition regarding the source of which our correspondent "Dryasdust" inquired in last week's JOURNAL, was copied from the fourth volume of the "Rolls of Parliament" in the library of the British Museum. It will be found at p. 158 of that work, under the heading "Petitiones in Parliamento Anno ix R. Henrici V." The Norman-French ordinance, issued in reply, is given at p. 130 of the same volume; being No. 11 under the heading "Rotulus Parliament. tenti apud Westm', secundo die Maii, anno regni Regis Henrici Quinti post conquestum nono."

ERRATUM.—In the JOURNAL for March 30th, p. 343, col. 1, line 16, for "cephalhæmatoma", read "encephalocele".

BRITISH MEDICAL ASSOCIATION.

ANY qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any three members of the Association, shall be admitted a member at any time by the Committee of Council, or by the Council of any branch. The subscription is One Guinea annually, due on January 1st; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year.

Gentlemen wishing to join the Association are recommended to communicate with the General Secretary, DR. WILLIAMS, Worcester; or with either of the following officers of the District Branches: *Bath and Bristol Branch—President*, John Soden, Esq., Bath: *Hon. Secs.*, R. S. Fowler, Esq., Bath; H. Ormerod, Esq., Bristol: *Birmingham and Midland Counties—Pres.*, E. Moore, Esq., Halesowen: *Hon. Sec.*, O. Pemberton, Esq., Birmingham: *Cambridge and Huntingdon—Pres.*, Dr. G. E. Paget, Cambridge; *Hon. Sec.*, Dr. Humphry, F.R.S., Cambridge: *East Anglian* (Norfolk, Suffolk, and Essex)—*Pres.*, R. Faircloth, Esq., Newmarket; *Hon. Secs.*, Dr. Chevallier, Ipswich; Dr. Pitt, Norwich: *East York and North Lincoln—Pres.*, W. H. Eddie, Esq., Barton-on-Humber; *Hon. Sec.*, Dr. H. Munroe, Hull: *Lancashire and Cheshire—Pres.*, Dr. M. A. Eason Wilkinson, Manchester; *Hon. Secs.*, Dr. A. T. H. Waters, Hope Street, Liverpool; J. M. Robinson, Esq., Bolton; J. Sharp, Esq., Warrington; Dr. J. Thorburn, Manchester: *Metropolitan Counties—Pres.*, J. Birkett, Esq., 59, Green Street, Grosvenor Square; *Hon. Secs.*, Dr. A. P. Stewart, 74, Grosvenor Street; Dr. A. Henry, 15, George Street, Portman Square: *Midland—Pres.*, G. E. Stanger, Esq., Nottingham; *Hon. Secs.*, Dr. Goode, Derby; H. Lankester, Esq., Leicester; Dr. Mitchinson, Lincoln; Joseph White, Esq., Nottingham: *North Wales—Pres.*, Dr. Turnour, Denbigh; *Hon. Sec.*, D. K. Jones, Esq., Beaumaris: *Reading—Pres.*, Dr. Woodhouse, Reading; *Hon. Sec.*, G. May, jun., Esq., Reading: *Shropshire* (*Ethical*)—*Pres.*, H. Fenton, Esq., Shrewsbury; *Hon. Sec.*, Dr. Styrap, Shrewsbury: *Shropshire* (*Scientific*)—*Pres.*, Dr. H. Johnson, Shrewsbury; *Hon. Sec.*, S. Wood, Esq., Shrewsbury: *South-Eastern* (Kent, Surrey, and Sussex)—*Pres.*, F. Fry, Esq., Maidstone; *Hon. Sec.*, P. Martin, Esq., Reigate; *Hon. Sec. Rochester, etc., district*, Dr. Dulvey, Brompton, Chatham: *South-Midland* (Beds, Northampton, and Bucks)—*Pres.*, Dr. Barker, Bedford; *Hon. Secs.*, Dr. Bryan, Northampton; R. C. Hurst, Esq., Bedford: *South-Western* (Devon and Cornwall)—*Pres.*, Dr. Hall, Torquay; *Hon. Sec.*, C. H. Roper, Esq., Exeter: *Hon. Secs*, *Cornwall district*, Dr. Littleton, Saltash, Plymouth; R. Q. Couch, Esq., Penzance: *West Somerset—Pres.*, John Prankerd, Esq., Langport; *Hon. Sec.*, Dr. W. E. Gillett, Taunton: *Yorkshire—Pres.*, W. Favell, Esq., Sheffield; *Hon. Sec.*, G. Hornby, Esq., York.

COMMUNICATIONS have been received from:—Mr. JONATHAN HUTCHINSON; Dr. GRAILY HEWITT; Dr. T. J. WALKER; Dr. WATERS; Dr. MACKESY; Mrs. BAINES; Dr. MURPHY; Dr. WM. BUDD; Dr. SKINNER; Mr. F. WILDBORE; Dr. JOSEPH STONE and Mr. JONATHAN WILSON; G. E. S.; MEDICUS; Mr. F. D. FLETCHER; and Mr. FOWLER.

BOOK RECEIVED.

1. The Uses and Abuses of the Turkish Bath. By Edward Haughton, M.D. With Notes and Appendix. London: Simpkin and Co. 1861.

Pepsine.—M. Boudault begs to state that he cannot be answerable for the purity and strength of any Preparation sold under his name unless obtained from his sole Agent, Mr. PETER SQUIRE, Her Majesty's Chemist, 277, Oxford Street, London, to whom all applications respecting it must be addressed.

Second Edition of Boudault on "Pepsine", with Remarks by English Physicians; edited by W. S. Squire, Ph.D. Published by J. Churchill, London. May also be had of the Author, 277, Oxford Street. Price 6d.

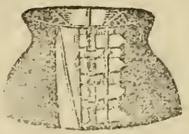
Aërated Lithia Water. — Messrs. BLAKE, SANDFORD, and BLAKE are prepared to supply the LITHIA WATERS (of which they were the original Manufacturers under Dr. Garrod's instruction) of any strength prescribed by the Profession for special cases. Those in constant use contain two grains and five grains in each bottle, either by itself or combined with BICARBONATE of POTASH or PHOSPHATE of AMMONIA.—Also, Potash, Citrate of Potash, Soda, Seltzer, Vichy, and Mineral Acid Waters, as usual.

BLAKE, SANDFORD, and BLAKE, Pharmaceutical Chemists,
47, Piccadilly.

Pepsine.—The Liq. Pepsiniæ, as used and recommended by Dr. Nelson, can be had from Messrs. W. & C. R. TITTERTON 6, Snow Hill, Birmingham.

J. & E. BRADSHAW, late

Shoolbred and Bradshaw, 34, JERMYN STREET, beg to call attention to the various improvements in PATENT ELASTIC STOCKINGS, BELTS, KNEE-CAPS, SOCKS, and Ladies' and Gentlemen's SPINE SUPPORTERS. A new description of BELT, invaluable for prevention of Cholera, and the cure of Rheumatism, Lumbago, etc. N.B. Every description of INDIA-RUBBER BANDAGE, vulcanized on the newest principle.



Directions for measurement sent by post.—N.B. A liberal Discount to the Profession.

A female to attend on Ladies.

PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c., &c., contained in "*The Dublin Hoſpital Reports,*" *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to make a good many clinical experiments, which "have enabled me to verify the reports which I had heard of the efficacy of JAMES'S POWDER, in ſometimes "removing the APOPLECTIC DIATHESIS in perſons advanced in life. It is, moreover, worthy of obſervation, that "JAMES'S POWDER has been of remarkable utility in certain inſtances of DETERMINATION OF BLOOD TO THE "HEAD, which occurred at an early period of life, and threatened to end by effuſion. Laſtly, in two caſes of "GENERAL PLETHORA, in which, however, the head was more affected than any other part, JAMES'S POWDER "was exhibited by me with perfect ſucceſs."

Also *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S POWDER, in cases of undue determination of "blood to the head, is that which I have generally purſued. The patient is made to begin with a very moderate "doſe, not more than two grains at bedtime, and to increaſe the doſe by half-a-grain every night, until ſome ſenſible "effect is produced upon the ſtomach, bowels, or ſkin. Should the ſtomach be affected with ſickneſs, the doſe "muſt be leſſened by one grain on the following night. *By the addition of a little rhubarb to it a larger quantity "of JAMES'S POWDER may be adminiſtered than the ſtomach could otherwiſe bear.* If the ſkin is ſoftened, or "the bowels affected, the doſe ſhould not further be increaſed, but it muſt be repeated every night for a conſiderable "length of time: in ſeveral inſtances I have known eighteen or twenty grains taken for a conſiderable period without "any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumleian Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the subject of Fever. He ſays (the *Lancet*, *June* 16, 1860, p. 590), as follows:—

"If the febrile excitement be ſuch as to require antimonial preparations, a pill containing 2 or 3 grains of "James's Powder (prepared by Newbery) ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

"I wish that your preparation was always uſed."

To ſecure the diſpenſing of the *original* preparation, which, for 114 years, has been ſold by the houſe of Newbery and Sons, in St. Paul's Churchyard, it is neceſſary to preſcribe it as "Pulvis Jacobi Ver., Newbery's," otherwiſe another article (wanting in the beſt properties, and recommended to be given in a different code of doſe, *though called by the ſame name*) may be ſubſtituted for the original medicine.

This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

FRANCIS NEWBERY AND SONS.

45, *St. Paul's Churchyard, London.*

Prices for Diſpenſing quarter oz. Bottle, 3s. 4d.; 1 oz. 9s. Uſual Diſcount to the Profeſſion.

Clinical Records

of

THE LOCK HOSPITAL.

BY

HENRY LEE, Esq., F.R.C.S.,

SURGEON TO THE HOSPITAL.

I.—A Clinical Lecture.

If there be one pathological fact that has been more frequently reiterated of late years than another, it is, that a primary syphilitic sore may be distinguished from every other affection by its secretion, when inoculated, invariably producing the characteristic syphilitic pustule. Although syphilitic inoculation was practised by Hunter and other accurate observers, it remained for Ricord to draw well-digested conclusions from the facts which this mode of investigation presented for our interpretation. By patient experiment and rigorous reasoning, Ricord established the truth, which has now been confirmed throughout Europe from Italy to Norway; namely, that certain forms of syphilitic sores will produce, when inoculated, their like, which in their turn will again furnish a secretion capable of being again inoculated with similar results. It would be difficult to overrate the importance of this discovery, so analogous to that of the small-pox inoculation. But practical men have, nevertheless, been unable to see in the experiments in question a conclusive representation of that which they daily observe in practice. That certain forms of primary syphilitic disease will produce the characteristic pustule, when inoculated, all must allow; but it does not follow, on the one hand, that all primary syphilitic sores are alike capable of being inoculated; nor, on the other, that when inoculated, they will necessarily yield the same result. Under these circumstances, and without proof as to these two last mentioned particulars, to say that a sore is syphilitic because it produces a characteristic pustule when inoculated, and that it produces a characteristic pustule because it is syphilitic, is manifestly to reason in a vicious circle. The propositions themselves are undoubtedly true; but they cannot, without further proof, be received as excluding other modes of syphilitic infection and other forms of primary syphilis.

We are led then to ask, in the first place, whether there is no form of primary syphilis except that which commences as a pustule. This question is important, since surgeons engaged in practice very seldom have an opportunity of observing the primary syphilitic pustule; and still less frequently have they an opportunity of tracing any secondary symptoms consequent upon it. Now, during the years 1855 and 1856, we examined at this hospital the secretion from a large number of primary syphilitic sores, and amongst these were ninety-five cases presenting all the ordinary characters of the primary infecting sores. The secretions from these ninety-five cases consisted of epithelial *débris* floating in a serous fluid, or of globules of various shapes and sizes, which did not, upon the addition of acetic acid, yield the well defined nuclei characteristic of pus. In a very considerable number of cases, the secretion appeared to consist of nothing but epithelial *débris* and serous fluid, and in some the sores yielded no fluid at all.

What reason, then, have we to believe that these primary sores commenced as pustules; or that, unless artificially irritated, they would produce pus at all? And, secondly, what evidence have we that every syphilitic sore produces a secretion capable of being inoculated in the same manner? It is to this point that I wish principally to devote this lecture.

When the secretion is taken from a chancre during its period of progress, or when stationary, and properly inoculated, the following results may, according to M. Ricord, be invariably observed. During the first twenty-four hours, the inoculated point becomes red; from the fourth to the fifth day, the secretion becomes purulent; and a pustule, with a depression in its centre resembling those of small-pox, is fully formed. (*Traité Pratique*, p. 89.) The inoculation never fails when properly performed. "*L'inoculation n'échoue jamais quand on prend le pus dans les conditions voulues et qu'on l'applique bien*" (p. 94). The appearance produced is said to be regular, characteristic, and uniform (p. 135). It is useless to multiply quotations upon this point, the facts concerning which have been so generally received and so often republished.

In the year 1856, I published an account of some cases in which, notwithstanding the assertions so unreservedly made and so generally received, I had not been able to produce any effect by ordinary inoculation. The experiments were tried in this hospital, care being taken to select instances in which the sores had not begun to heal; and among the cases were the following.

Thomas C., aged 16, was admitted on the 27th of November, with an indurated sore extending half-way round the margin of the prepuce, causing phimosis. This had commenced a fortnight previously. The secretion from the sore was carefully inoculated on the patient's thigh in several points. The inoculations were followed by no result, and the patient was soon afterwards affected with secondary syphilis.

James G., aged 25, had a large indurated sore near the orifice of the prepuce, which had appeared as a pimple four weeks previously. The secretion was carefully inoculated in several points, but without result. Constitutional syphilis followed.

Matilda P. presented on the left external labium a well marked indurated sore, which she stated had existed one week only. The secretion, which consisted of a thin serous fluid, was carefully inoculated. No result followed the inoculation.

Julia B., aged 21, had a red glazed sore on the external labium, surrounded by distinct specific induration. The disease had commenced three weeks previously, as a pimple. The secretion from the surface of the sore was inoculated without result.

Since the period above referred to, we have inoculated the secretion from a considerable number of sores presenting the characters of the specific adhesive inflammation; and, as a rule, no result has been obtained where no artificial irritation has been applied. The secretion in these cases has consisted chiefly of epithelial *débris* floating in serum more or less turbid. The character of the secretion of these sores may readily be altered by anything that is brought in contact with them. The application of caustic, or a thick scab which confines the secretion, or a piece of linen which sticks to the sore, will produce a temporary discharge more or less puriform; but dress the part with wet lint for a day or two, and the natural character of the discharge will again be evident.

As a rule, then, I say (at least, that has been our experience at this hospital) that this kind of primary sore is not, under ordinary circumstances, capable of being inoculated with the lancet; and we therefore cannot but come to the conclusion that those who have maintained that all primary syphilitic sores can be alike inoculated have generalised too hastily. But a much more important question remains; namely, Does it follow that, because these sores are not capable of being inoculated by the lancet in their ordinary condition, therefore they cannot be communicated at all? And, if capable of being inoculated under certain circumstances, are the results produced identical with those produced by the inoculation of the secretion from suppurating sores?

In order to determine these questions, I would request your particular attention to some cases now in the hospital, and particularly to that of a boy named A. The details of this case, and the results of the inoculations performed, I will immediately mention; but, before doing so, I would draw your attention to the fact that in practice we continually meet with cases which in their early stages are similar to the one I am about to describe, and which, with or without treatment, become covered by epithelium; and, although the specific induration remains, yet the surface of these sores affords no fluid secretion whatever. Inoculation in the ordinary way at this period of the disease would be entirely out of the question. But, if a person in the condition I have mentioned get married, his wife will have a good chance, even before her pregnancy, of becoming infected with syphilis. Some very distinct cases where this has happened have fallen under my own observation. How, then, is the disease communicated in these instances? We have here a rather numerous class of cases in which the sores have become covered over with cuticle, which yield no pus nor fluid secretion of any kind, and yet which are capable of communicating infection from one individual to another. How, I ask, does the inoculation take place from a sore affected only with the specific adhesive inflammation either before or after that sore has apparently healed? Some light will, I think, be thrown upon these questions by the careful consideration of the facts presented to our notice in the boy A., at present in the hospital.

This lad had had gonorrhœa six months before his present attack, but otherwise he had never had any venereal symptoms. His present disease was of about a fortnight's duration. He first perceived a superficial sore behind the corona glandis, which healed in a few days. Two or three days after the first appearance of this sore, a little pimple appeared on the outer skin of the prepuce. This was squeezed, and discharged a watery fluid. A circular sore then formed, which continued to increase. He applied to me on the 25th of July, with a well marked Hunterian chancre. This was of a circular form, surrounded by well marked and accurately defined induration, and discharged a white turbid secretion. This fluid was placed under the microscope, having previously been mixed with a little acetic acid. It contained no pus-globules. The glands in the groin were enlarged and indurated, but not inflamed.

July 27th. The secretion from the sore was inoculated in several points on the patient's thigh.

July 29th. The boy was admitted into the Lock Hospital. The inoculations had been followed by no result. The secretion from the sore was again examined, and found to contain no pus.

July 31st. The sore, which continued to increase in size, had been dressed with linen and cold water since last report. The linen appeared to have irritated the sore in some degree, and numerous globules now appeared in the secretion; but, upon the addition of acetic acid, the distinct outline of the pus-nuclei were not visible. Several fresh inoculations were made. The sore was dressed with wet lint.

Aug. 3rd. None of the inoculations had succeeded. The secretion from the surface of the sore, placed under the microscope and treated with acetic acid, did not appear to contain any pus. The sore was now ordered to be dressed with the acetum lyttæ. The glands at the back of the neck were now enlarged, and skin presented for the first time the appearance of a syphilitic eruption.

Aug. 5th. None of the former inoculations had been followed by any effect. The application of the acetum lyttæ had produced a superficial slough on the surface of the sore, and blistered the surrounding skin. Some distinct pus-globules were now visible in the secretion from beneath the slough. This secretion was inoculated upon the thigh in several points.

Aug. 7th. The sore now again secreted no pus. Fresh inoculations were performed.

Aug. 10th. The sore was dressed twice yesterday with the unguentum sabinæ, and it now yielded a copious secretion of pus. This was inoculated in several points in a fresh place upon the thigh.

Aug. 12th. The inoculations last made had succeeded. The primary sore still yielded a copious secretion of pus.

Aug. 14th. The sore had been dressed with lint, kept wet with water since last report, and now no pus could be detected in the secretion. The inoculations both of the 5th and of the 10th had now succeeded. They presented the appearance of circular red patches, with some elevation and thickening of the cuticle. In one place there was the appearance of a broken vesicle, from which a serous secretion exuded. This secretion from the inoculation was again inoculated on the thigh.

Aug. 17th. The inoculation from the inoculation had succeeded. It presented the appearance of a red circular patch, from which the cuticle was abraded, with slight thickening of the skin. It had not at all assumed the appearance of a pustule, nor was anything like pus secreted from its surface. A single pustule, surrounded with very little inflammation, had formed in one of the points first inoculated. The eruption on the surface of the skin was fading. All the inoculations in this case were made with a lancet used for no other purpose, kept carefully wiped and wrapped in paper.

Aug. 19th. The inoculations appeared as separate red patches on the skin. The skin in these situations was slightly raised and thickened, but no induration extended into its substance. The solitary pustule which had appeared had dried up. The original sore was healing; but, being dressed with the unguentum sabinæ, it afforded a purulent secretion, which was inoculated upon another patient who was apparently suffering from organic disease of the liver.

Aug. 21st. The inoculations presented the same appearances as before; they appeared covered in certain parts with thin scales. They were tender to the touch, with slight thickening on the surface, which did not extend into the substance of the cutis. The inoculations nowhere presented any appearance of ulceration. The inoculations performed on the 19th had produced a small dark brown circular patch, in which the skin was slightly elevated. The secretion from the original sore was now again inoculated on a second female already affected with constitutional syphilis.

Aug. 24th. One of the inoculations on the boy had a slight tendency to ulcerate; the others were desquamating and losing their colour.

The single inoculation on the first woman had assumed the form of a small red pimple. The redness gradually faded into the colour of the surrounding skin. The cuticle at the inoculated part was thickened and elevated.

The inoculation on the second woman, already affected with constitutional syphilis, was less marked. There was only a slight redness and elevation at the inoculated part.

The particulars of these last two cases we may follow out on a future occasion. From the facts which have already been brought under notice, the following very important points are proved.

1. That some primary syphilitic sores cannot readily be inoculated in the ordinary way upon the patient who has them, either during the period of progress or afterwards.
2. That the sores which are not capable of being thus inoculated, as far as we have hitherto seen, are those affected with specific adhesive inflammation, and which do not, except under conditions of artificial irritation, secrete pus.
3. That these sores, although not capable of being inoculated in the ordinary way, will nevertheless, when irritated, furnish a secretion which is capable of being inoculated apon a patient already affected with syphilis.
4. That the inoculations thus produced do not give rise, as a rule, to either suppuration or ulceration, but to some adhesive form of inflammation.

The inoculations to which attention has now been directed, and the results of which may be seen in two other patients now in the hospital besides those to whomI have above referred, have all assumed a remarkably uniform character. There are many points of the greatest interest connected with this newly demonstrated form of artificial inoculation, which must be carefully distinguished from the effects of inoculation upon a patient not previously diseased. Here, after a certain period of incubation, a well marked Hunterian chancre would probably have been the result of each inoculation performed for the first time.

Dr. Winship Outdone. Dr. Winship, the celebrated Massachusetts athlete, who was asserted to be the "strongest man in the world," has met a superior in the person of one William Thompson, who is connected with the Chicago Gymnasium. The test of strength occurred in that city one day, at a gymnastic tournament, at which Dr. Winship performed his great muscular feat of lifting nine kegs of nails, weighing 1000 pounds, and raising, with the aid of harness on his shoulders, 1517 pounds. He was succeeded by Thompson, who, commencing with the last lift of the Doctor, then went on adding weights, and lifting with harness on shoulders and hips, until the numbers stood successively, 1536, 1636, 1736, 1836, 1936, 2036, 2136 pounds—a very remarkable lift the latter, to be sure. He also experimented with dumb-bells weighing 100 and 165 pounds. Another competing gymnastic, named Curtis, "pushed" first 130 pounds, and then 150 pounds in each hand with the pulley, and, lying down upon his back, put up 110 pounds in each hand. (*American Paper.*)

Original Communications.

THE GALVANO-CAUSTIC APPARATUS: ITS APPLICATIONS IN SURGERY.

By Thomas James Walker, M.B.Lond., late Assistant-Physician and Pathologist to the Queen's Hospital, and Demonstrator of Anatomy in Queen's College, Birmingham.

The galvano-caustic apparatus is extensively used in Vienna for the removal of morbid growths, as well as for other purposes. Owing to the absence, during the greater part of my stay last year in the Austrian metropolis, of Dr. Adolph Zsigmondy, *Primararzt* in the Hospital, who is the great advocate of the galvano-caustic mode of operating, I saw less of it than I should otherwise have done.

In the skin wards for the treatment of lupus, I several times witnessed its employment as a caustic by Professor Hebra. To all the parts affected, the instrument was applied at a white heat; thus, in a case of lupus of the ear, the porcelain cauteriser was deliberately applied to the whole surface of that organ. During the operation, which was necessarily a slow one, the size of the instrument being about that of an ordinary lead-pencil, the patient, a nervous female, continued shrieking violently. In another case, almost cured, the small pointed platinum cauteriser was applied to the numerous points, where new centres of the inveterate inflammation were appearing upon the healed parts. During this process, the patient, a boy, scarcely uttered a groan; but it is hard to say whether this depended on absence of suffering, or on the fortitude produced by the prospect of one or two *ten-kreutzer* pieces which the professor gave him for his good behaviour, when the operation was completed. Similar courage, or freedom from pain, was manifested by a young man in another case, where the cautery was applied round the edges of the several large patches of lupus non exedens, which existed about his body.

In Dr. Zsigmondy's practice, I had an opportunity of seeing the employment of this instrument, as a cautery to various ulcers of the leg. The galvano-caustic instrument in these cases, where the surface to be treated was large, did not avail for the completion of the operation; the aid of the ordinary actual cautery being called in, on account of the much larger heated surface which the iron heated in a charcoal fire affords, as compared with the small portion of platinum or porcelain which can be heated by the galvanic current. The first application of the glowing cautery to these parts appeared exquisitely painful, there being of course no particular virtue in the heat produced by electricity which should prevent its causing pain; but, in comparing the actual cautery as usually heated with that heated by the continuous voltaic current, as regards the pain caused by their application, we find that the latter, possessing in itself the source of heat, is not cooled by the tissues of the body, consequently it quickly and completely destroys their sensibility and vitality, producing only a momentary pain; while the former, however massive it may be made in order that it may retain its heat, is, on its first application to the tissues, so cooled by them, that it requires a longer application in order completely to destroy the structures with which it is in contact, and may in many places only half burn them, causing therefore pain of some duration. This I would advance as a general rule. To the eschar left where the instrument had been once applied in these cases of ulcer, it might immediately afterwards be reapplied without producing any pain. In pointing out what I conceive to be comparative merits of the galvanic cautery, I do not wish it to be supposed that I am advocating what appears to me an unnecessarily harsh and cruel treatment of a disease which does not require the use of the cautery at all. It may be that in gangrenous ulcers of the leg, and also in cases of hospital gangrene, many English surgeons would be inclined to adopt the treatment by the galvanic cautery; but for varicose and indolent ulcers, none of us, I think, would employ it.

In a case of large epulis growing from the outer side of the gum opposite the left wisdom tooth of the lower jaw, I saw the application of the cutting noose (*Schneideschlinge*), an instrument which consists essentially of a platinum-wire ligature heated to a white heat by the galvanic battery, and capable of being gradually tightened by means of a screw. In this case, the wire noose being thrown round the tumour, and drawn so as to surround its base closely, the galvanic circle was closed, and the wire, becoming white hot, was slowly tightened; it gradually passed through the tissues until the tumour dropped into the mouth; to the part of the gum where it had been attached, the porcelain cautery was applied, and the operation was complete. As to the amount of pain caused by the removal of the growth, I am unable to form an opinion; for, although no chloroform was administered, the patient had fortified himself for the operation by drinking a quantity of wine sufficient to make him noisy and talkative. Very little coughing was caused by the smoke which the burning of the tissues produced in considerable quantity, the patient evidently respiring chiefly by the nostrils; the bleeding was very slight indeed, the patient spitting out once or twice only a little burnt blood and saliva. The wooden spatulas which were employed to protect the tongue and the sides of the mouth did not quite answer their purpose, as the tubes containing the platinum wire, becoming heated during the operation, blistered both the tongue and the cheek. In other cases which I saw, the mode of proceeding was so much the same, that I will not detail them.

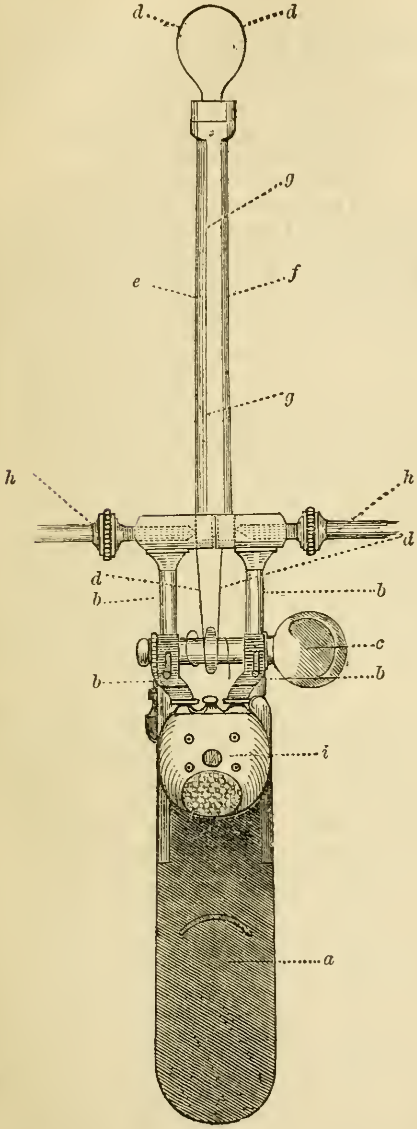
The galvano-caustic mode of operating has been brought to so much higher perfection in Germany than here or in France, and of the plan pursued by Mr. Marshall and other advocates of the proceeding in England so little is generally known, that I shall describe at some length the instruments employed by Dr. Zsigmondy in Vienna, which are almost the same as those employed by Professor Middeldorpf of Breslau, differing only in certain small points, which are, however, very important in their effect in improving the working of the apparatus. The essential part of the instrument is, of course, the galvanic battery; it is necessary that this be a constant one and very powerful. After many attempts to avail themselves of simpler and less expensive forms, the surgeons and instrument-makers have decided in favour of a Grove's battery as the most useful.

The communication between the battery and the instrument to be used must be made by means of wires sufficiently large to offer no opposition to the voltaic current, which must arrive in a full stream at the platinum wire which is to be heated; and these wires must at the same time be as light and flexible as possible, in order that they may interfere but little with the movements of the operator's hand. In Zsigmondy's apparatus, these conducting wires are formed thus. A bunch of capillary copper wires are carefully bound round with silk, so as to constitute a compound wire of about the twentieth of an inch in thickness; and from six to eight of these are again bound together to form a thicker wire. When the platinum wire of the instrument to be employed is very fine, so full a current is not required to heat it, and accordingly a lighter wire than that described may be used.

The instruments employed in these galvano-caustic operations are the various forms of cautery and the cutting noose, to most of which I have had occasion to allude. The various cauteries, as well as the cutting noose, are instruments in which a fine platinum wire, by being placed in communication with the two conducting wires, may be made the means of closing the galvanic circuit; these wires being made as good conductors as possible, and the far smaller platinum wire being a much worse conductor, the full stream of electricity meets here with such resistance as causes it to heat the wire to whiteness. The several varieties of cautery are formed on the same principle. They consist essentially of a wooden handle, through which run two copper wires, connected by their further extremities with the ends of the platinum wire of which the instrument is formed; while by the other extremities they may, by means of a screw, be made continuous with the conducting wires of the battery. The copper wires in the handle are at least four times as large as the platinum wire of which the cautery is composed. One of them is cut across, and its two portions can be easily connected or disconnected, by pushing a slide on the handle upwards or downwards, with the thumb of the hand holding the instrument; so that, the combining disk being in its place, and all ready for the operation, we still see the instrument cool and inactive, until the slide being pushed forward, the platinum wire begins to glow, and rapidly rises to a white heat, at which it remains, when all the cells are in use, and the wire is thin, even while in contact with the tissues to be acted upon. So intense is the heat, that, unless the instrument be applied immediately to the tissues, so as to cool it somewhat, the wire will sometimes melt, high as is the melting-point of platinum.

The cauteries used are various, according to the platinum portion of the instrument. In the *Galvanokauter*, the platinum wire, one twenty-fifth of an inch thick, is flattened out into a form of blade with a beaked point; this is used as a cutting instrument, or its beak-shaped extremity as a fine cautery. In the porcelain cautery, the platinum wire is spirally twisted round a small porcelain capsule, about the third of an inch in diameter; to this the heat developed in the wire is communicated, so that a much larger cauterising surface is obtained than could be got by the wire alone. Other forms of cautery for burning through urethral strictures, for passing down the lacrymal duct, for the destruction of the nerve-pulp of the tooth, etc., are also sold with the battery and other parts of this apparatus.

The cutting noose (*Schneideschlinge*) consists of a handle (*a*), from which projects forward a framework (*b b*) in which an ivory screw (*c*) is fixed; round this the two ends of the platinum wire (*d*, *d*, *d*,) are wound, and, when it is turned, the wire is shortened. From the front of the frame pass forward two metallic tubes (*e f*), to contain the platinum wire; and these are isolated from one another by the ivory support (*g*); at the junction of these tubes with the frame between them and the handle are two screws (*h h*), by which the platinum wire at this situation is made continuous with the conducting wires from the battery. The noose of platinum wire, which is usually about the fiftieth of an inch thick, being thrown round the part to be removed, the combining disk is placed on the battery, and the course of the galvanic force must be by the conducting wire to the screw at one side of the base of the double cannula; and, the communication of the wires below being prevented by a portion of ivory projecting round the middle of the screw mentioned, up the wire in the tube of the same side, round the loop, and down the other cannula to the screw at the other side of the base, and so back to the battery. Not only the projecting loop of platinum wire becomes heated, but also to a certain extent that within the tubes; and it is on this account necessary, in operating with the instrument at the bottom of the buccal, vaginal, or other cavities, to protect the neighbouring parts from contact with the cannula, or with the fluids which flow from the seat of operation very much heated, for unless this be done, they will be burned, as in the case of epulis above described.



[*To be continued.*]

LONG INCUBATION OF VACCINATION. A correspondent writes to us: "One year and a half ago, I vaccinated a little grandchild of mine, six months old. It did not work, and the three incisions made rapidly healed up. She has never been vaccinated since; but about five months ago, all three places became sore, and she had the true vaccine pock. Her father vaccinated several children from her, and it worked well in every case. I saw the child last week, and found the well-marked, characteristic cicatrices." (*Med. and Surg. Rep.*)

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By AUGUSTIN PRICHARD, Esq., Surgeon, Clifton, Bristol.

V.—OPERATIONS ON THE EYE.

[*Continued from page* 386.]

Operations for the Removal of Opaque Capsule. The eleven following cases could not well be classed under either of the former heads, and they differ a good deal from one another, having, however, this one point in common, that the operations were undertaken to remove portions of opaque capsule or dislocated lens from the eye.

CASE CCCLIX. M., aged 30, had amaurosis of the left eye for many years, and, as is frequently the case, after a long time, a cataract was developed in it. The day before I saw him, the lens slipped suddenly into the anterior chamber, producing pain. It was of a yellow colour, and looked very hard. I made a lower section, as for the extraction of cataract; and the knife, in its passage across the anterior chamber, thrust back the lens through the pupil. I removed it with the curette; and the eye was well in two days.

CASE CCCLX. M., aged 63, had met with an accident many years before I saw him, by which his right eye had been ruptured, and the sight destroyed, leaving a piece of membrane (the iris, probably) floating about in the eye; and six months before he came under my care, he received a thrust from a cow's horn in his other eye, which also ruptured the sclerotic, and squeezed out the lens; the conjunctiva being unbroken, it remained resting upon the upper part of the globe of the eye, like a round yellow tumour. The eye was excessively weak and intolerant of light. Upon dividing the conjunctiva, the lens escaped, and his eye became stronger in a few days. He went home in a fortnight with his eye sound, and able to see well with a four-inch lens.

We have, of course, met with a considerable number of these cases of dislocated lens, when it escapes through a fissure in the sclerotic, and remains under the conjunctiva until it is let out; but this one is peculiar, from the great length of time during which the lens was in this unnatural position, and the successful termination of an unpromising case. It is also a peculiarity in this case that the patient ruptured both his eyes accidentally at different times; and, although a little out of place, I am inclined to narrate here in connection with it another instance where a similar occurrence took place. It is probable that in each of these patients the sclerotic was very thin.

CASE CCCLXI. M., aged 61, received a blow in his only eye (the right) a few months before I saw him. The blow was inflicted by his wife, who beat him in this way, and left him; and he was quite blind, and obliged to go to the union. Upon asking him how he lost his left eye, he said it had been struck out by his "first queen"; by which we were to understand that he had formerly had another eye, and also another wife, and that she had ruptured it accidentally by a blow, as the second wife had the second eye purposely. I cannot but think that this man had also very thin sclerotics.

The right pupil was much distorted and very small, and I enlarged it by removing a portion of the iris; and when he had recovered from the effects of the operation, some opaque matter was found blocking up the aperture. This I removed at a second operation, and the pupil was easily cleared, but his sight was no better. I operated a third time, with the view of enlarging the pupil still more, and effected it satisfactorily, but he never saw any better.

CASE CCCLXII. M. The right eye had been lost by accident; and when I saw him, the left had become almost useless from iritis. This eye was soft; but he could distinguish light with each. I extracted, by means of the cannula forceps, through a small corneal aperture, a piece of opaque capsule which blocked up the pupil. He suffered a good deal of pain, but the sight was improved.

Case cccLXIII. M., aged 30, had an accident in his right eye in childhood, and ever since his sight had been almost useless. I removed an opaque capsule, which entirely blocked up the pupil, and he saw very well for a few days, but afterwards more dimly, and, upon examination, it appeared that the lens had remained clean behind the capsule, and that the removal of the latter had caused the former to become opaque. The cataract thus formed was gradually absorbed, and he recovered with fair sight.

Case cccLXIV. M., aged 50, an old amaurotic case, in which one eye had been operated on for cataract. The left eye was excessively painful, from the presence of a yellow opaque lens, which had slipped forward, without accident, into the anterior chamber. I removed it piecemeal by a lower section, and the eye soon recovered.

Case cccLXV. M., aged 2. This child had been born with cataracts, and had been operated on by some other surgeon for that disease, and the pupils were left blocked up by opaque capsule. I gave him chloroform, and with a small knife made a corneal section, and removed a portion of the opacity from each pupil. He was sick from the chloroform for three days, and then recovered completely, with clear pupils, and evidently saw well.

Case cccLXVI. M., aged 40, a labouring man, thin, weak, and ill, suffering from the constant irritation of his left eye, in which was a hard and chalky looking lens. The right eye was so weak that he could not work. The cause of his condition being obvious, I removed it by a corneal section. The lens was adherent all round, and his eye being much inflamed, the operation was extremely painful. From the time when it was concluded, his pain ceased, and the other eye became strong.

Case cccLXVII. M., aged 31, from the Blind Asylum. A most unpromising case, with opaque capsule blocking up his pupil. I removed the opacity, and left clear pupil, but the sight was no better.

Case cccLXVIII. M., aged 17, with opaque capsule remaining in the pupil after an operation by another surgeon. I removed it, and he recovered speedily with a clear pupil and good sight.

Case cccLXIX. F. The left eye was sightless, and the right much damaged by a former perforating ulcer of the cornea, with iritic adhesion and opaque capsule. I removed the latter without difficulty, and she went away seeing more light, but with her eye still very weak.

[*To be continued.*]

Manufacture of Ice. M. Carre (*Cosmos*, t. xvii, p. 686) takes two strong iron retorts (quicksilver bottles, they say, will answer), into one of which he puts a saturated solution of ammonia. When the two are connected, he places the empty one in a vessel of water, and the other over a fire. The heat drives over ammonia, which is condensed by pressure in the previously empty retort. When the ammoniacal gas is liquefied, the one retort is removed from the fire and allowed to cool, whereupon the ammonia in the other rapidly assumes the gaseous form, abstracting so much heat from the water by which it is surrounded as to freeze a considerable quantity. The experiment is repeated without disconnecting the retorts. The cost of ice made in this way is said not to exceed a *centime* per *kilogramme*—or about fivepence a hundredweight. (*Dublin Hospital Gazette.*)

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, & DARTFORD DISTRICT MEETING.

ON CERTAIN FORMS OF UTERINE HÆMORRHAGE OCCURRING AT OR NEAR THE FULL PERIOD OF UTERO-GESTATION: CONCEALED ACCIDENTAL UTERINE HÆMORRHAGE.

By John Armstong, M.D., Gravesend.

[*Read at Chatham, March* 22, 1861.]

In the paper which I had the honour to read before the society at their last meeting, held at Maidstone, I stated that it was designed as introductory to a case of concealed accidental uterine hæmorrhage; and that my reasons for bringing it under the consideration of the society were: First; The rarity of these cases—so rare, that some of our best writers on these subjects have not seen an example. Secondly; Their extreme danger; for of all the instances which have been put upon record, nine in number, seven were fatal. The mortality occurring in connection with placenta prævia is high enough; but it is trifling in comparison with that occurring from these cases.

I apprehend that there is a danger of only slightly reflecting on these cases, in consequence of their rarity. Men console themselves with the hope that, from that circumstance, they may never meet with one. But suppose the contrary. How much better the prospects of the patient, how much better for the accoucheur's own reputation, and above all, how much more consolatory to his own feelings, when examined *in foro conscientiæ*, if he have carefully reflected and considered over such cases.

Case. On March 15, 1860, at noon, I was requested to see Mrs. W., aged 40, in her eighth pregnancy. She was short, stout, and had a large umbilical hernia, for which she wore a truss. I learned that she had had labour pains from about eight o'clock a.m. On examination, the membranes gave way on the very slightest touch, and discharged a good deal of dirty yellowish fluid. I may say no force whatever was used; and so easily did they give way, that I am sure they must have burst of themselves with the next pain. The os was open to the extent of a shilling. The head was above the superior aperture of the pelvis, and had not at all entered it, but, by careful examination, I discovered a face presentation. Of course, I considered that there was nothing to do but to wait. The pains continued strong, and she exerted herself considerably to hasten the labour; still the head produced but little effect upon the os, neither had it entered the pelvis. I left at 1.30, and returned in half an hour. The nurse said she had had a free discharge; and on examining this, I found about two ounces of bright arterial blood. I feared that the placenta was being detached, and that internal hæmorrhage would ensue; and with an os so little dilated, I considered there was very great danger. I requested that some other person might be joined with me. In a short time, another practitioner came. I explained my views; but I could not for some time convince him of the tremendous danger of the case. At last, we agreed to attempt to deliver. I opened the head at the frontal bone, and, when passing the crotchet, I tried to pass in a couple of fingers, and succeeded in finding a foot. The placenta came away with the nates, and must have been lying loose in the uterus. When my fingers were in the uterus it appeared full of liquid and coagulated blood. Pressure was maintained on the abdomen; stimulants were freely given; but the patient sank about half an hour afterwards. During the whole of the dangerous period she never complained of faintness, and answered questions put to her. There was no syncope, yawning, nor throwing herself about; neither was there any external hæmorrhage; for not more than eight ounces flowed externally altogether. There was but one index to the frightful danger, and that was the pulse; which, from being of good power became gradually feebler, until at last it ceased; then there was a slight convulsion and all was over. The placenta presented on its fœtal surface a natural appearance; but its under or maternal surface had two deep fissures, as if torn through by some blunt instrument. No *post mortem* examination was obtained.

I may observe that in 1841 a woman died at Northfleet undelivered. She was attended by a practitioner since dead; and, as great dissatisfaction arose in the minds of the friends, an inquest was summoned, and I was directed to examine the body. In that case I found a large coagulum of blood, probably some pounds in weight, between the placenta and the uterus. The placenta was detached and fissured at its edges. No blood had flowed externally; it was a case of concealed accidental hæmorrhage.

I shall now conclude this paper by a brief abstract of Dr. Braxton Hicks's valuable paper produced before the Obstetrical Society; and to whom I feel greatly obliged for the courteous manner in which he has permitted me to use that paper before this society.

He defines these cases thus:—Blood issuing from a separation of the placenta from the uterus makes its way between the membranes and uterus and appears externally; the proportion appearing externally may be very small, while the internal hæmorrhage may be large. The part where the separation takes place materially affects the case. If it be near the margin, a clot forms and stops the bleeding; if in the centre, the placenta becomes detached by little and little (the margin still adhering), and the elastic uterine walls yielding, till a quantity of blood is effused fatal to both mother and child. The absence of blood externally serves to deceive us. This may occur at any time after the placenta is formed. His paper refers only to cases occurring at or near the full period. It is of rare occurrence, there being only eight cases on record. Neither Nevins, Merriman, Blundell, Ingleby, Lee, Baudelocque, Hardy and McClintock, nor Murphy, appear to have met a case in their own practices, as they quote from others.

The following is a condensed account of the cases recorded:—

1. In Albinus's case, the margin of the placenta retained its adhesion; the middle portion was separated. Death resulted. He speaks of emptying the womb as the most important treatment.

2. Saumarez relates the case of a lady near the full term. She became faint; a small quantity of blood (half an ounce) flowed externally. The os was rigid, and scarcely dilated. Death occurred. The centre of the placenta was detached; its edges were adherent; and blood was effused into this *cul-de-sac*.

3. In Coley's case, the patient was aged 48, and was seven and a half months advanced in pregnancy. The symptoms were faintness, great pain, and syncope. There was no external hæmorrhage. Ergot was given, and the membranes were ruptured. She recovered. In centre of placenta was a deep depression, and two pounds of blood.

4 and 5. In cases narrated by Dr. Johnson to Drs. Hardy and McClintock, there was no external hæmorrhage. The separation of the placenta was produced in one by external violence; in the other, spontaneously. Both died, and *post mortem* examinations shewed the placenta entirely detached, except at its extreme margin, and containing large quantities of blood.

Dr. Oldham relates three cases in *Guy's Hospital Reports*.

6. A lady, aged 40, in her fourth pregnancy, within six weeks of her time, was seized suddenly with syncope. The uterus was enlarged; it became hard; there was no uterine action. The os was of the size of a shilling; the membranes were flaccid; the head presenting and moveable. The liquor amnii was discharged by puncture. Bandage and ergot were used. The child was expelled; sudden faintness came on. The hand was introduced, and the uterus was found full of liquid blood and coagula. The placenta was loose. The uterus was contracted; the placenta was hollowed out by clots. The patient recovered ultimately.

7. In Guy's Hospital Charity, a woman, aged 40, at full time, was seized with faintness. The os was of the size of half a crown; the head presented. There was no external hæmorrhage. She rallied after some time. When the membranes were ruptured, no great quantity of fluid flowed. Labour progressed. Ergot was given. She became faint; the pulse was rapid; the body warm; no external hæmorrhage occurred. She attempted to sit up in bed, and in ten minutes was dead. On *post mortem* examination, large clots of blood were found in the uterus. The placenta was detached, except a small portion.

8. Another case occurred in Guy's Charity, the patient being aged 38, between eight and nine months advanced in her eighth pregnancy. The os was of the size of a shilling; the head presented; there were no pains. Cold and sweating were present. The attendant left; and when he was summoned again she was dead. No external hæmorrhage occurred. The walls of the uterus were thin; about five pints of blood were found between the placenta, and the wall of the uterus. The placenta was quite detached.

9. In Guy's Charity, a woman aged 40, in her eleventh pregnancy, had had hæmorrhage with former pregnancies. After two hours labour, the membranes broke. Collapse set in; stimuli were freely given to no good effect. After two hours, Dr. Hicks saw her, and found her low and weak. The os was fully open; the head was in the pelvis. No more discharge than usual occurred. The uterus felt tense and hard, as if contracting strongly. He ordered support. In an hour he was summoned; the child had been expelled suddenly, and the placenta followed almost immediately and with it a great quantity of blood. Cold was applied; the uterus was grasped firmly; ergot was given; cold was kept constantly applied to the uterus. About half a pint of blood flowed. Syncope, delirium, jactitation, vomiting, and shortness of breathing, followed. The patient lingered for twenty-four hours and died. The anterior surface of the uterus showed a number of rents; one oblique, as if cut by a knife, about two inches long and a quarter of an inch deep; several others were confined to the peritoneal coat. The posterior surface was natural. The anterior wall was twice as thick as the posterior, of a white waxy semi-transparent appearance, firm to the touch, and tough. Not a trace of blood-vessel could be seen in this. The peculiarity of these rents was that not a drop of blood had escaped into the peritoneum. The interior of the uterus was as it should appear after labour.

"Thus, there were nine cases and seven deaths. Two of the patients recovered; one slowly, and one well. Of the seven at full time all died; two at the eighth month died. In three the liquor amnii escaped spontaneously all died; two, in which it was artificially discharged, recovered, and they were the premature cases. The children all died. The leading symptoms were syncope in labour; the uterus enlarging, firm, and tense. The danger is greater, the nearer to full term the accident occurs. The treatment consists of cold, compression, and, if there be not much exhaustion, delivery."

The foregoing abstract of Dr. Hicks' admirable paper, though a bare outline, will serve to bring the subject more clearly before your minds than the narration of my own cases. I feel I have done inadequate justice to his facts; but the limits to which we are restricted would not admit of more extended detail. I hope, however, the time of this learned body has not been uselessly employed, and that these feeble attempts to give precision to our views and practice have not been altogether unsuccessful.

CASE OF PRESENTATION OF BOTH ARMS.

By G. HENTY, M.D., Newington-next-Sittingbourne.

[*Read at Chatham, March* 22, 1861.]

ON Monday morning, Dec. 10th, 1860, I was called in consultation on the case of Mrs. S., who was in great danger from exhaustion from a tedious labour, with preternatural presentation. On the previous Saturday morning she had been taken in labour, having strong pains, and in the afternoon a spontaneous rupture of the membranes took place, and, as the midwife stated, one hand immediately presented. Owing to the difficulty of obtaining a medical man during the Sunday—the gentleman engaged being absent from home—no one saw the case until Sunday night about ten o'clock, when the gentleman summoned found the symptoms somewhat critical. During the night his efforts to relieve were unavailing, and he sent for me about seven o'clock on Monday morning. On examination, I found both arms presenting, and vigorous uterine pains, although the patient was much exhausted from the length of time she had been in labour. After administering stimulants freely, I attempted to pass up the arms, and perform the operation of version, but found the arms were immovable, and the shoulders and breast firmly impacted in the pelvis, with the head bent back between the scapulæ, the curving of the neck being distinctly felt. The vigorous action of the uterus rendered version impossible, by contracting upon my hand with extreme force so as to give positive pain, and I then administered strong opiates to lessen such action in the hope of succeeding; but, after several fruitless attempts, I gave my opinion to her husband and friends that she was in extreme danger, and required further operative proceedings, and determined on amputation of the arms and evisceration. In the meantime Dr. A. Martin was consulted, who concurred in the necessity of speedy relief by such an operation. The arms were both soon removed by my cutting through the muscles with a sharp crochet, tearing away their attachments, and dissecting the humeri from the sockets. Immediately the arms were amputated, I found the uterus coming into more general activity—the impaction was removed; and I determined, before proceeding to the tedious operation of evisceration, to try version once more, as the most speedy plan of relief, and I soon succeeded in obtaining one foot, on which I fastened a loop securely, and with gentle traction for some time, this difficult case was reduced to one of comparative ease. The child was much above the average size and weight. The patient short and stout, but had suffered from much illness in her lifetime. It was her eleventh labour, all of which had been more or less difficult. She progressed favourably for four days, but on the fifth syncope supervened, and she never rallied, having suffered for some time from dyspnœa arising from morbus cordis.

The above case is interesting and very instructive, shewing clearly that the operation of version might have been easily performed in the early stage of labour, with liquor amnii present; but was very difficult after being left so long to herself, with the arms, shoulders, and breast forced down so low by such vigorous pains. It is also so uncommon a presentation, that I ventured upon giving publicity to the case.

ON THE CURABILITY OF INTRACAPSULAR FRACTURE OF THE NECK OF THE FEMUR.

By FREDERICK J. BROWN, M.D., Rochester.

[*Read at Chatham, 22nd March*, 1861.]

IN bringing before you the subject of fracture of the neck of the femur within the capsule, I am desirous of recommending to you, on the grounds of my own experience, the treatment by the long splint continued for 100 to 140 days.

The extension method by the long splint is sanctioned by Samuel Cooper, and the period of treatment is that prescribed by Dupuytren.

The result has been successful in the five cases treated by my brother John and myself within the last three years. The treatment was attempted in a sixth case; but it was abandoned within a fortnight, in consequence of the opposition of the patient and his friends. It was also attempted in a case of one year's duration; but it was abandoned in one day on account of the refusal of the patient to submit longer to restraint.

In the five cases that were treated, firmness was obtained at the seat of fracture, whatever might be the nature of the uniting medium, and a useful limb was the result.

The abstract of the cases is as follows:—

CASE I. Mr. M., sexton, aged 68, was thrown down in the street by a butcher's horse. The left femur was broken at its neck. This occurred on the 14th January, 1858. The limb was useless, but not distorted. Crepitus was felt in the groin when the heel was lifted.

The long splint was applied, and kept on for fifty-one days. A casing of plaster was then substituted for the splint. The recumbent posture was maintained for one hundred and six days. Union of the fragments was obtained, and the patient recovered perfectly. He had congestion of the head during the treatment, which required careful management by leeching and medicines throughout the entire period.

CASE II. Mrs. W., aged 51, the wife of a water-carrier, was knocked down in the street by her husband whilst he was intoxicated, on the 27th August, 1858. The right femur was broken at its neck. The limb was elongated half an inch, and the toes were slightly everted. The injury resembled a case of dislocation into the foramen ovale; but there was perfect movability. Crepitus at the groin could be felt.

The long splint was applied and retained for seven weeks, when the hip was encased with plaster and the straight position kept up for some weeks longer. The cure was perfect.

CASE III. Mr. C., aged 69, gardener, fell upon his side on the 3rd December, 1858. The left femur was broken at its neck. Crepitus at the groin was felt; there was no distortion. The long splint was retained for fifteen weeks. Perfect recovery took place.

CASE IV. Mr. S., aged 68, broke the neck of the femur on one side (I have omitted to note which), on the 17th January, 1859. The long splint was applied; but it was removed, and all treatment abandoned, within a fortnight, in consequence of the opposition of the patient and his friends. The man is bed-ridden now, shewing that nature is unequal to the cure of this injury.

CASE V. Mrs. R., aged 75, fell down stairs on the 9th April, 1859. She broke the left femur at its neck. The long splint was applied and retained for ninety-six days. The recovery was perfect.

CASE VI. Mrs. W., aged nearly 76, was pushed down in the street on the 1st June, 1859. The right femur was broken at its neck. I applied the long splint next day; but I removed it from the limb and discharged the patient in less than a week, in consequence of the insubordinate conduct of the patient. I was sent for in four weeks time, and I found the woman suffering greatly from pains in the limb. There was œdema from the foot to the hip. I reapplied the splint on the 4th July, and retained it until the 23rd September, when I removed it. The fractured part was firm, allowing of no motion when the limb was raised by the heel. The patient was cured at the end of one hundred and fifteen days, but the extension was kept up continuously for the last eighty-two days only. There was slight œdema of the limb remaining, but there was no pain. This woman was able to walk with a stick in the course of a few weeks. I saw her a few days ago; the limb is useful but there is a limp in her walk.

Case vii. Treatment was attempted in a case of one year's duration, as follows:—Mrs. O., aged upwards of 60, had been bed-ridden for twelve months, when the long splint was applied on the 13th January, 1859. No medical treatment had been used in this case, for the patient had not sought for advice. The limb was œdematous and extremely painful. The long splint was removed on the day after its application, in consequence of the refusal of the woman to endure restraint.

In conclusion, I beg to state the following propositions:—

1. That treatment by easy posture with pillows is disastrous in its results, not being better than entire absence of treatment.
2. That œdema and pain of the limb continue for life in untreated cases.
3. That treatment by extension by the long splint for one hundred to one hundred and forty days is perfectly successful in obtaining firmness at the seat of fracture and a useful limb.
4. That similar treatment, if deferred for the first few weeks will give a limp in the walk of the patient for its result.

SOUTH-MIDLAND BRANCH.

PRESENTATION OF BOTH HANDS.

By Robert Charles Hurst, F.L.S., Fellow of the Obstetrical Society of London, Honorary Secretary to the Branch.

[*Read at Newport Pagnell, Oct. 12th,* 1860.]

I was requested on May 17th of the present year to attend Mrs. A. B., residing some little distance from Bedford, a person of delicate constitution, and extremely nervous temperament. She had been prematurely confined on two previous occasions. In the first instance, the child was still-born; in the second, it survived only a short time.

On my arrival, I found that the preparatory stage of labour had fairly commenced, and took advantage of a slightly increased pain to ascertain the nature of the presentation. At this period, however, I was unable to effect my object, as the os uteri was high up, but slightly dilated, and the patient was in a great state of nervous irritability. Under these circumstances, and by request, I remained at the house, desiring the nurse, who was highly efficient, to watch the case, and let me know when assistance might be required. After two or three hours, I was informed that the pains had considerably increased, and that there was a sensation of something present in the vagina. Upon making an examination, I found the membranes protruding, and so delicate that they ruptured on the slightest touch. A large quantity of liquor amnii escaped; and with the succeeding pain, which was very forcing, both arms passed completely into the vagina, and with the next both hands began to protrude from the os externum.

The pains now became frequent and the contraction strong, so that I found that all attempts to introduce the hand for the purpose of turning only produced great distress, and if persisted in would inevitably be the cause of serious mischief. The patient became very restless, and the nervous excitement increased; so that I determined at once on administering a full dose of tincture of opium, and relying upon the benefit of rest.

In about an hour and a half after the anodyne, the pains became greatly suspended; so much so, that I thought I might fairly attempt the operation. On very carefully and with great difficulty introducing the hand along the vagina, I detected in the upper portion a small loop of the funis, which, on passing the fingers gradually into the uterus, protruded to a great extent on the accession of a slight pain.

The vagina now being completely blocked up by the presentation, as well as by the presence of my own arm, the progress of the hand was extremely difficult, and the cramping effect upon it very severe.

After some further efforts, and tracing from the insertion of the umbilical cord, which was quite distinct, I detected the knees impacted in the left iliac fossa. Hooking my finger round the flexure of the knee-joint, I was enabled gradually to bring it to near the insertion of the cord, and having thus far succeeded, was fortunate by means of a piece of whale-bone to pass a fillet round the joint. The efforts in effecting this renewed the pains considerably, which cramped and benumbed the hand so much, that I brought the part gained into the upper portion of the vagina, retaining it by the ligature.

The uterine fibres continuing to contract strongly on the child, the presenting part was of course firmly forced down, and the body so much compressed that the circulation in the cord was impacted to such an extent, that I entertained but very slight hopes of saving the life of the child.

With steady perseverance, however, during the intervals of pain, a gradual revolution of the fœtus was effected, and the other knee presenting in the vagina was brought down, and after some little further delay delivery was completed.

The placenta was adherent to some extent, but the detachment was managed without any considerable difficulty.

Remarks. It occurred to me that this was rather an unusual case; and, indeed, on referring to the obstetric works to which I have access, I find but little recorded on presentation of both hands. This must be my apology for presuming to introduce the subject to the notice of this meeting.

Dr. Ramsbotham gives a case in which the head presented with a hand on each side; but he adds that, the membranes being unruptured, he was enabled to prevent the further protrusion of the hands until the head had so far advanced as to preclude the possibility of their descent. In this case obviously that method of proceeding was quite impracticable.

Burns, in his *Principles of Midwifery* (6th edition, p. 389), remarks: "Sometimes both hands are felt at the os uteri, and even both arms may be expelled into the vagina; but in most cases this does not happen, unless an improper conduct be pursued."

No interference had been resorted to in this case, so that it must be regarded as an illustration of the possibility of such a presentation occurring spontaneously, although very rarely.

In a foot-note (p. 394), Burns mentions one case as occurring in the practice of Peu, where both arms were protruded, in which instance he applied a fillet over the breech to bring it down. (*Pratique*, p. 412.)

On seeing this notice of Peu's case, I must confess I was forcibly struck with the coincidence of having also had recourse to the fillet.

The only other practical point to which I need refer was the administration of the opiate. It was evident to me at the time that a full dose of laudanum was clearly indicated, and on referring to the same eminently practical writer, Dr. Burns (p. 392), he remarks that in order to render the process of turning safer and easier, "we shall generally succeed by giving a powerful dose of tincture of opium—not less than sixty or eighty drops."

This plan was first proposed by the late Professor Hamilton of Edinburgh (*Select Cases in Midwifery*, p. 102), and has also been approved of by several succeeding practitioners.

From certain cardiac symptoms which I had previously noticed, the administration of chloroform did not appear to be at all justifiable.

Reviews and Notices.

Elements of Medical Zoology. By A. Moquin-Tandon. Translated and edited by Robert T. Hulme, M.R.C.S.E., F.L.S., etc. Pp. 423. London: Baillière. 1861.

There is no branch of science that has been so unjustly treated at the hands of authority in this country as zoology. In the country of Montague, Ray, John Hunter, and Owen, the science of animal form has but rarely been taught in her universities and medical schools. By the munificence of a private individual, Oxford has at last a professor of zoology; but such a chair exists not in Cambridge, Edinburgh, Glasgow, or Dublin. Whilst France, with a true sense of the dignity of science, distributes this noble study amongst seven or eight professors in Paris, and creates a distinct chair of zoology in all her provincial colleges, we in England are content with little more than the mere name.

In sober truth, we are very much ashamed when we think of all this, of which we have been reminded by Mr. Hulme's translation of the French professor's *Elements of Medical Zoology.* We are not often called upon to notice French translations; and, where such a thing occurs, we believe it is done under the impression that there is a pressing necessity for such a work. Without promising to the publisher a large circulation, we think the field was open. With the exception of Dr. Lankester's translation of Küchenmeister's *Manual of the Parasites of the Human Body*, we know of no book that treats at all comprehensively of this subject in our language. There is then, undoubtedly, a field for the work; and we hope that, although a man may pass through all his medical and surgical examinations without being expected to know the distinctions between an oyster and a tapeworm, there will be found a sufficient number of medical students in earnest about zoological studies to repay Messrs. Hulme and Baillière for their enterprise in publishing this volume.

Still, we ask, why should the sciences be broken up for our convenience? Why should there be a medical zoology, a medical botany, a medical chemistry, and medical physics? This does not arise from our strength, but from our weakness. If we were taught zoology properly, we should want no medical zoology; we should each of us make our own medical zoologies. Well, for those who have not studied zoology, here is a book to help them to find the way to all they ought to know. Of course it starts with man. Man is the first of beasts, and the creature without which there would be no need of medical zoology at all. At the same time, we must say that he looks as if he were introduced here to patronise the rest of the animal kingdom. Still, for those who have not read Latham, or Pickering, or Knox, or Carpenter's article in the *Cyclopædia of Anatomy and Physiology*, this little summary will be found useful. In this, as in other parts of the work, Mr. Hulme has let in good solid pieces of literary masonry of his own, which certainly improve the original not a little.

From this section we pass to zoology proper; and here we have chapters or books on the organisation and the classification of animals. We then come to the real medical zoology. The first chapter in this department is devoted to animals and the animal products employed in medicine. This includes an historical account of animals or animal products formerly used in medicine, and of all those forming a part of the modern *Materia Medica*. Some of the substances mentioned are rarely enough employed at the present day, as wood-lice, crabs' eyes, and spiders' webs; nevertheless, they constitute a peg on which to hang some interesting zoological observations. Then we come to parasitical and non-parasitical animals. The latter are arranged as those which bite and those which poison. Here we have accounts of bugs, vipers, and spiders. The author concludes that the bites of spiders are not dangerous; but neither author nor translator seems aware of Mr. Blackwall's experiments on this subject. Mr. Blackwall allowed himself to be bitten by all sorts of spiders, without any ill effect. We do not think he exposed himself to the attacks of the tarantala; and M. Moquin-Tandon says he is "acquainted in the present day with well-authenticated instances of serious disorders and convulsions produced by the bites of these animals".

One-fourth of the book is devoted to parasites. They are divided into external and internal; the external, into those which live on the skin, as lice, ticks, and harvest-bugs, and those which live under the skin, as the itch-mite and the *demodex*. The internal parasites include more particularly the entozoa. The author here, as in other parts of his work, has availed himself of the English translation of Küchenmeister's *Manual of Parasites*, and has given a very good summary of what is known of this very interesting branch of medical zoology. As the facts in the history of the human tapeworm cannot be too widely known, we give the sketch of its history.

"The following are then the successive transformations which the *Tænia communis* undergoes before arriving at its perfect state.

"The egg encloses a short unarticulated embryo, which, when it is hatched, is furnished with three pairs of hooks (*hexacanthi*), of which the two central are for the purpose of fixing it to the tissues of the animal selected by the parasite for its abode.

"Once it is attached to an animal, as for instance a pig, this kind of rudimental larva becomes, or more correctly speaking engenders by an *agamic* process, a new individual enclosed within its parent; the latter becomes encysted in the infected animals, like a caterpillar in its coccoon, where it becomes transformed into a chrysalis. (Van Beneden.)

"This second larva has a head with four suckers, a double circle of hooks, and a moderately long neck, which terminates in a membraneous enlargement or vesicle with delicate walls, and filled with serum; within this the young animal can withdraw itself, or entirely close itself up. This kind of minute worm resides in large numbers in the cellular tissues, on the fat, beneath the skin, in the midst of the muscles, and in the peritoneum.

"The animal lives in its cyst, like a Cynips in a gall-nut.

"In this second state, the larva forms the *Cysticercus cellulosæ;* it is the *hydatid* stage.

"The larva is capable of producing other individuals similar to itself by the process of *gemmation*, but not by a true act of *generation*. When the pig becomes measly, it contains millions of individuals.

"If this larva and its progeny cannot escape from the tisues in which they have become encysted, their development does not pass beyond the condition of the *cysticercus*.

"When the *cysticercus* enters the alimentary canal of man, it attaches itself by means of its hooks and its suckers to the surface of the mucous membrane. It soon loses its vesicle, which becomes degenerated by exosmosis, and assumes the appearance of a flattened appendage. The animal becomes more transparent, lengthens, assumes a flattened form, and produces a number of segments, which constitute special organisms placed end to end, and enjoying a community of life, but each of which, at the same time, is provided with all the elements essential to its individuality. This long chain of zoonites may be regarded as another form of agamic reproduction.

"This third stage corresponds to the perfect animal, and constitutes the *tænia*.

"It has been seen that the larvæ, when they emerge from the egg, are neither flat nor vesicular; and that the *cysticerci* are flat worms furnished with an *hydatid* termination. The *acephalocysts* may be described as large *hydatids* without the flat anterior body; while the *tæniæ*, on the contrary, have long flat bodies without the terminal *hydatid*.

"In the course of two or three months, a *tænia* may attain the length of several yards.

"Each segment is both male and female. At the period of procreation, the ovaries are enlarged, and become distended with an enormous number of eggs. After this the articulations separate from each other, and each of these becomes an independent organism.

"The fourth stage is that of the *cucurbitins*, or separated segments.

"These are passed out with the excrements; they continue to live for some days; they then decompose, and the eggs which they contain are dispersed abroad.

"The eggs retain for a long time the power of germinating; they resist the effects both of high and low temperatures, of dryness and humidity, and also of water and of alcohol. At length they pass either with the food or the drink into the interior of some animal or of man: they then become hatched, and give rise to a new generation of *cysticerci*, which in their turn are developed into *tæniæ*." (Pp. 399-401.)

The work is illustrated with one hundred and twenty-four woodcuts, some of which are very good. Mr. Hulme has, on the whole, executed his task with considerable skill. We observe that he has made some omissions, which perhaps are of little consequence; but he has added a considerable quantity of matter, which certainly renders his translation an improvement on the original French edition of his work.

Insanity in China. Dr. S. Wells Williams, Senior Vice-President of the Medical Missionary Society in China, and who has been for twenty years resident in that country, states to us that he has observed but two instances of insanity among the Chinese during this period. He has seen a greater number of idiots, but the class is by no means numerous. (*Journ. of Insanity.*)

DR. BEALE'S LECTURES

ON THE

STRUCTURE AND GROWTH OF THE TISSUES OF THE HUMAN BODY.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, 1861.

In his Introductory Lecture, delivered on April 8th, Dr. Beale commenced by alluding to the great interest attached to the study of the structure and growth of the tissues. He would, however, restrict himself mainly to the anatomy of the simplest tissues of the body.

The history of the changes which occur in man from the commencement of his existence to its natural close, is a history which can never be made perfect. We can hardly hope to see the outline of such a work as this firmly established on well ascertained facts; but how could our time be more usefully employed than in collecting and arranging materials, and urging on by every means in our power researches, the results of which may contribute to form the outline?

There are some who are constantly struggling to prove, by reiterated assertion rather than by simple evidence, how little practical benefit is likely to result from scientific work. It is possible that men, who by this systematic disparagement apologise for their own dislike of labour, are the involuntary instigators of that which they desire to retard; for in all ages unreasonable opposition has been the unwilling, but not the least efficient, means of rapidly establishing truth on the firmest possible basis, and of extending it far and wide. Any one who fairly compares the principles on which disease is now treated with those generally accepted even fifty years ago, cannot fail to observe a wide difference. Dogmas were laid down by authority, where now the merest tyro can only be influenced by reasons; and the clever theories of the cleverest thinkers were appealed to as the basis of practice, while in the present day a more solid foundation is being slowly, but, let us hope, surely established, by submitting every opinion to the tests of observation and experiment.

Were the elements of physical science as generally taught as the elements of arithmetic, we should not have to deplore the influence exerted by the table-turners, the spirit-rappers, and the whole class of medical impostors. These men live by flattering the conceit and fostering the ignorance of people who have never learned to think. By encouraging to the utmost of our power the study of physical science, we shall be more serviceable in protecting the public (since every man acquainted with the elements of physical science would protect himself) from imposition, than by endeavouring to increase the stringency of our laws.

It is, Dr. Beale observed, miserable to see in many instances with what effrontery and tact the charlatan, well acquainted with the weaknesses of mankind, imposes on the credulity of those he pretends to serve but it is more miserable, and almost hopelessly disappointing, to hear it asserted that in our own ranks there are a few individuals so devoid of self-respect, and so utterly benumbed to all that is serious and good and true in medicine, as to submit to the farce of a consultation with such a one; and thus, by one single act, bring on us a disgrace which the courage and self-devotion of hundreds of perhaps less successful but more honourable men will hardly obliterate.

Advance in medicine has at all times been so intimately associated with, if not absolutely dependent upon, the progress of certain collateral sciences, especially anatomy and animal chemistry, that it is to be regretted that these pursuits are not more generally prosecuted by physicians in this country. That scientific investigation in connection with medicine is not carried on under the superintendence of the physician to a much greater extent is, Dr. Beale believed, in great measure to be attributed to a serious defect in all our hospitals. Many physicians must have felt the want of well arranged scientific work-rooms, where various microscopical and chemical investigations could be carefully carried out under their direction. Dr. Beale hoped that the time is not very far distant when this defect will be remedied. In the minds of some persons there is undoubtedly an impression that such inquiries cannot be conducted without disadvantage to the patient; and there is a tendency in the public mind to draw a distinction between the so-called "practical" doctor and the scientific man who thinks and theorises, but is not up to the direct means of giving relief to a patient in pain. We are, however, all aware how much we have learnt during the last few years from the investigations into the secretions in health and disease, which have been lately carried on both in this country and on the continent. We should, Dr. Beale thought, make every effort to establish such a department in connection with our large hospitals; for surely a very important part of our duty is to work out and enforce principles which, when acted upon, may increase physical development and mental vigour.

Till within the last few years, an impression has been gaining ground, and is even now, Dr. Beale feared, too generally diffused, not only amongst practitioners but among students, that minute investigation tends to make us unpractical, and that work in the laboratory and in the museum is antagonistic to the study of disease in the wards of an hospital. Such statements are most positively contradicted by the history of those who have led the most useful professional lives. This disparagement has discouraged many from prosecuting useful work, who would otherwise now be advancing the best interests of their profession, and employing their spare time in a manner most advantageous to themselves, instead of feeling dissatisfied with their progress, and perhaps discontented with their profession. Surely the earlier years of professional life cannot be more usefully or more happily spent than in prosecuting some branch of scientific inquiry in connection with our profession.

During the last few years, the love for such work seems to have revived; and if the taste be widely diffused and encouraged, the position which we shall occupy in Europe and America as prosecutors of scientific medical inquiry, will not be inferior to that which is generally accorded to us in questions relating to the practical treatment of disease.

Dr. Beale then proceeded to the immediate subject of the lectures. He observed that the only terms which are not generally used in quite the same sense in which he would employ them, are the following:—

Elementary parts, into which every structure may be divided. A particle of epithelium is an elementary part. The elementary part consists of matter in two states.

Germinal Matter. Matter in a state of activity, or capable of assuming this condition, possessing inherent powers of selecting certain inanimate substances, and of communicating its properties to these, exists in all living beings, and from it every tissue is produced. He proposed to call this *germinal matter.* A certain portion of the germinal matter of many elementary parts is comparatively quiescent, but is capable of assuming an active state at a subsequent period. These portions are the so-called nuclei and nucleoli; and new nuclei and nucleoli will make their appearance within them when they have grown into ordinary elementary parts.

The matter on the external part of every elementary part exists in a passive state, as—

Formed material, which was once in the condition of germinal matter, but it has now ceased to be active. It cannot communicate its properties to lifeless matter. Its composition, form, and properties, depend upon the powers of the germinal matter which it often protects by its passive nature.

Secondary Deposits. These are insoluble matters which vary in form and composition in different cases, and may be considered in some cases to consist of *formed material*, which has been deposited amongst the germinal matter. Deposits may accumulate to such an extent as to cause the germinal matter to form a very thin layer between them and the formed material.

The lecturer now called attention to the arrangement of the microscope with which he was about to exhibit the tissues. The instrument was made after the manner of a telescope with draw-tubes; the object was fixed across a stage below the object-glass by a spring which pressed against the back of the slide. By this arrangement, he could easily place any part of the specimen under the object-glass, and by means of a little screw-clamp he could fix it firmly in the exact spot he wished. The object was brought into focus by screwing down the middle draw-tube to the proper position, and the more exact focussing was effected by drawing the tube to which the eye-piece was attached backward and forwards. In this arrangement, the preparation was held firmly in its place, and it was scarcely possible to alter its position if ordinary care were used. This apparatus enabled objects to be examined under the tenth and twelfth-of-an-inch object-glasses. The microscope was firmly fixed in a stand provided with a small oil-lamp giving a good light. The focus could be altered by drawing the tube to which the eye-piece was attached in and out, until the object was seen perfectly clearly.

In the preparations shown, the part of the tissue which is active, and which possesses the highest powers of increase, was tinged of a dark-red colour by carmine. This, Dr. Beale termed *germinal matter.* It exists in all living beings, and at every stage of their growth, but its proportion varies according to the age of the tissue.

The youngest tissues consist almost entirely of germinal matter, while in the oldest textures little exists. Those tissues which grow rapidly and change much, contain a large proportion of germinal matter; while, in those which grow very slowly, comparatively little is found. The tissues which possess such different properties were all once in the condition of germinal matter, and the properties which the tissue possesses in its fully developed state, depend upon the powers of the germinal matter from which it was formed. Tissues which are remarkable in their adult state for the large quantity of so-called intercellular substance, exhibit but little during the early period of their development, while in their earliest condition there is no intercellular substance at all.

The *tissue* or *formed material* is not coloured by carmine; and, if by prolonged maceration it be stained by it, the stain may be removed by soaking in glycerine, but the tint still remains in the germinal matter. Dr. Beale believed that, in every living being, by the action of an ammoniacal solution of carmine, and subsequent soaking in glycerine, we can positively distinguish the *germinal matter* from the *formed material.*

In most of Dr. Beale's preparations the capillaries have been filled with a transparent Prussian blue injection containing a little alcohol and chromic acid; so that while the vessels are filled with colouring matter, the adjacent textures become permeated with a fluid which prevents decomposition, and many transparent albuminous textures are rendered just sufficiently granular to enable their arrangement to be seen distinctly.

By these methods of preparation several minute points have been determined, such as the relation of the cells of the liver to the terminal branches of the duct; the ultimate distribution of nerve-fibres in several different tissues; the structure of the ganglia of the sympathetic; the relation of the terminal branches of the nerves to the dentinal tissues. Nerves have been readily traced and microscopical ganglia demonstrated in the fibrous tissue of the pericardium, in the submucous tissue of the epiglottis and pharynx, in the transverse fissure of the liver, and in the substance of the tongue; the formation of bone and dentine has been studied under the highest magnifying powers. The tissues may be preserved permanently and examined with the highest powers.

Dr. Beale had been led to differ in opinion upon some very important questions, from many of the highest authorities; for instance, as to whether certain appearances depend upon the presence of solid bodies in the tissues, or are spaces containing fluid; whether certain delicate lines are fibres or tubes; which is the oldest and which is the youngest part of a tissue; and as to the offices performed by tissues, etc.

He thought that many of the most difficult questions can only be solved by studying very carefully the circumstances under which the tissues in question may be examined, so as to display their characteristic peculiarities in the clearest manner possible. He selected the following specimens for illustration.

1. An injection of some simple papillæ of the human tongue under a magnifying power of 130. Three separate ones were seen. The epithelium had been removed and the capillaries fully injected with Prussian blue. Oval bodies, consisting of germinal matter, tinged bright red with carmine, passed in various directions in the papillæ, and were very numerous at the summit of each. Of these oval bodies, some were connected with the capillary vessels; but the great majority, Dr. Beale would endeavour to prove, were connected with the nerves forming a sort of network lying on the surface of the capillary vessels, and embedded in a transparent tissue.

2. A thin section removed from the central part of the tongue of a white mouse, prepared as the last specimen, and placed under a power of 215. The fibres were observed with capillaries ramifying over them. The oval nuclei were principally connected with the capillaries and nerves. These specimens illustrated the general appearance of the capillaries when injected with Prussian blue, and the oval bodies when stained with carmine.

3. A thin section from the tongue of a mouse just killed, placed in a little very weak glycerine, and magnified 130 diameters. The smaller vessels could not be discerned. Nuclei were seen, but very indistinctly, and in smaller number than they existed. The want of definiteness about the structure would cause one to conclude that, in this specimen, areolar or connective tissue predominated over every other tissue; and that the nuclei were connected with the fibres of the areolar tissue, although an absolute connection between the fibres and nuclei could not be seen.

4. Another specimen from the central part of the tongue of the mouse, from the same part as the last section, but injected and soaked in carmine. The "connective tissue" of the last specimen was seen to contain numerous capillaries and nerve-fibres. The nuclei seen in the section were clearly connected with the nerves and capillaries. Nerve-fibres, not more than the one ten-thousandth of an inch in diameter, could be traced to and from the ganglion. The nuclei on the surface of the ganglion, usually considered as the nuclei of the connective tissue surrounding its cells, belonged to the nerve-fibres growing from the cells. This specimen was magnified 250 diameters.

There is, however, no organ which enabled the importance of different processes of preparation to be illustrated, so well as the liver.

Upwards of six years ago, Dr. Beale succeeded in injecting the ducts of the liver, and believed that he had demonstrated that the ducts were continuous with tubes containing the liver-cells. He regarded the liver as the most perfect type of gland, because the largest quantity of secreting structure and blood were brought into the closest relation, while they occupied the smallest possible space. His preparations proved to him that injection passed directly from the ducts into a network of tubes with very thin walls, which were occupied with the liver-cells. The coloured injection passed between the cells and the walls of the tube, insinuating itself through very narrow channels, but nevertheless forcing its way along for a considerable distance, and sometimes it reached the centre of the lobule. As he could force injection thus artificially in a direction the reverse of that in which the bile flows during life, he considered the possibility of the bile flowing between the walls of the tube and the cells fully proved. These conclusions were published in a paper in the *Phil. Trans.*, in 1856; and, after an interval of several years, Dr. Beale could now speak with far greater confidence.

Dr. Beale now referred to a misunderstanding of his description on the part of Professor Budge of Griefswald. He (Dr. Beale) did not believe that any one who was himself accustomed to microscopical work would have considered that the merest tyro could have made such a mistake, as the one which he was credited with by Professor Budge. He exhibited his own drawing of the specimen, and Professor Budge's inference from the drawing of the appearance of the specimen (which he had never seen). Dr. Beale also sent round the preparation itself. It was magnified 215 diameters. The blue injection was shewn amongst the cells in the tubes, and not the faintest indication of the tubes around each cell.

6. A corresponding preparation from the human liver magnified 130, showing the ducts just at the edge of a lobule, and their continuity with the tubes of the cell-containing network.

7. Also from the human liver, showed the capillaries injected blue, and the cell-containing network alternating with them, and having in all parts of the lobule exceedingly thin walls, but quite distinct from the capillaries. This preparation was magnified 215.

Perhaps, however, the most perfect demonstration of the cell-containing network, and its continuity with the ducts is obtained from the examination of the liver in cirrhosis, in which disease the cells and tubes shrink, the change commencing at the portal aspect or circumference of the lobule, and proceeding gradually towards the centre.

8. A section of a healthy liver under an inch object-glass. The portal vein was injected with carmine, and the hepatic vein with Prussian blue. The capillaries of the lobule were filled with the colouring matter—those in the centre of each lobule being blue, while those at the circumference are red. The interlobular fissures were very narrow, and in many places the capillaries of one lobule were continuous with those of adjacent lobules. The interlobular spaces were clearly destitute of any areolar or fibrous tissue. They were occupied by branches of the portal vein, and branches of the artery and duct, and lymphatics, which had not been injected in this specimen.

9. A specimen of cirrhose liver in which the vessels had been also injected. Here a wide space existed between the contiguous lobules, of which but very little, and only of the central part of the lobule, remained in many cases. Vessels and tubes were observed in the substance of the tissue usually stated to be fibrous.

10. A specimen of a cirrhose liver, magnified 130, soaked in carmine. The shrivelled cells could be seen within the narrowed tubes, and the network was very distinct.

11. A specimen from the same liver put up in water. Not a vestige of anything but "fibrous tissue" was to be seen where we now know numerous tubes and cells and vessels are actually to be demonstrated. By immersing a delicate preparation in water, Dr. Beale could often produce the appearance of the presence of a large quantity of fibrous or connective tissue.

These specimens would, the lecturer thought, serve to shew the great importance of preparing tissues; for he had clearly proved that many structures ordinarily invisible may be demonstrated most distinctly by certain special processes. He might have taken illustrations from almost any other tissues of the higher animals, or from the lower animals or plants; but he had chosen those which seemed to bear most directly upon that department of microscopical inquiry, which is of the greatest interest to us as practitioners of medicine.

British Medical Journal.

SATURDAY, APRIL 20th, 1861.

THE TURKISH-ROMAN QUESTION.

The effects which the Turkish bath produces upon the sick human economy, good or evil, have yet to be told. Certainly, however, this Eastern-Roman question has a very extraordinary influence over the minds of those of our professional brethren who undertake to recommend it to the consideration of the world. Authors, and especially medical authors, who treat of the bath, deal with it in a style which strongly reminds us of that eastern mode of story-telling which was so pleasant to us in our days of childhood. Reading the tale of the eastern bath is like reading of Aladdin and his wonderful lamp. We are at once snatched away from the realms of reason and commonplace, and transported into a luxurious atmosphere of poetical imaginings. We take up pamphlet after pamphlet on the bath, and still the same style and the same romance pervade them all.

We cannot say otherwise of the last specimen of the history of this institution which has fallen into our hands.* One might certainly have thought that we should have received from the hands of one who has gone through the severe process of writing a matter of fact work on *Descriptive Anatomy* something like a reasonable statement of the case, regarded from a medical point of view; and especially so when reminded of the speciality for which Mr. E. Wilson is famed, and the peculiar supposed applicability of the bath to the subjects of his speciality. But we are utterly disappointed. The book, from beginning to end, is just the same eastern rhapsody as its predecessors.

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* The Eastern or Turkish-Bath: its History, etc. By Erasmus Wilson, F.R.S.

> "Before he entered the sacred precincts of the Apodyterium, he undid the latchets of his shoes" (the writer is speaking of himself); "he left his shoes beyond the door; he brought with him none of the dust of the external world into the portals of the bath. In the Frigidarium, or rather in the Apodyterium, he left behind him his vestments, and assumed the simple garb of the inner bath."

When a man has got into such a state of mind as to use language like this to describe the taking off his boots and his breeches, we need scarcely say that it is hopeless to seek for much scientific research in his sayings.

This book, however, has not only disappointed us; but we fear it will be productive of mischief. "The bath", Mr. Wilson says, "gives us appetite and strengthens digestion." "The bath serves us in lieu of exercise." Mr. Wilson, in fact, instead of extracting the good out of Mr. Urquhart's extravagant laudation of the bath, seems to have quietly adopted all the absurdities of this kind which Mr. Urquhart has said of it. Unable, indeed, to compete with the author of the *Pillars of Hercules* in language and in the matter of imagery, Mr. Wilson has had resource to that book for descriptive flights of a still higher and more spicy kind than the above. In telling of the time for taking a bath, as a sample of the use and luxurious charm of the thing, Mr. Wilson takes the following *jeu d'esprit* from his leader.

> "Would it be no comfort, no pleasure, no benefit to an English lady, on retiring from a ball, and before going to bed, to be able, divested of whalebone and crinoline, and robed as an Atalanta, to enter marble chambers with mosaic floors, and be refreshed and purified from the toil she has undergone, and prepared for the soft enjoyment of the rest she seeks?"

We suspect that some of our readers when they read these lines will be reminded of the social appendages which in ancient days lived next door to the Roman bath. Literature of this kind, at all events, smacks, to our taste, rather of a social evil, than of a social good.

The bath, introduced to the notice of the public in such fashion as this, cannot be otherwise than productive of injury to them. It becomes simply an appendix to an overwrought and degenerate civilisation; an invitation to the infringement of the laws of nature. Indeed, what we have already said (on a previous occasion) on the subject of the Turkish bath is fully justified in these pages. It is really strange, that Mr. Wilson has told us nothing of the real uses, of real beneficial effects produced by the bath in disease; and yet this is the point upon which all of us want some satisfactory information. Mr. E. Wilson may say that he professes only to treat of the bath as "applied to the purposes of health." If so, all we can say is, that to take his view of human life, health itself is a lasting disease; and the Turkish bath a Heaven-sent remedy to counterpoise the malady. Mr. Wilson shall speak for himself:

> "Give us brain, give us mind, however ungovernable, however preponderant its overweight to the physical powers, however destructive to the powers of the body. In a word, we select a morbid condition: our meals, our air, our exercise, our indoor and outdoor habits are all unsound; we prefer that they should be unsound; the necessities of our life, of our position, require that they should be unsound. How grand, therefore, the boon that will correct these evils without the necessity for making any inconvenient alteration in our habits!
>
> "That boon is the bath. The bath promotes those changes in the blood for which fresh air is otherwise needful. The bath gives us appetite, and strengthens digestion. The bath serves us in lieu of exercise. 'The people who use it,' writes Mr. Urquhart, 'do not require exercise for health, and can pass from the extreme of indolence to that of toil.' How glorious a panacea for those home-loving matrons whom no inducement can draw forth from their *Lares* and *Penates*, to enjoy a daily wholesome exercise, and who, as a consequence, become large, and full, and fat, and bilious, and wheezy; and who, in their breach of Heaven's law, lay the foundation of heart disease."

Are we not justified in saying, that works of this kind must be dealt with rather as Eastern fables than as philosophic studies? Surely, true philosophy should rather teach us to retrace our steps into the ways of natural health, than encourage our deviation from those paths!

HOMŒO-QUACKERY: WHO ARE ITS BEST FRIENDS?

We last week published a correspondence sent to us from the Medico-Ethical Society of Manchester; and we now refer to it, because we would say that, in this matter at least, the medical men of Manchester have set the profession an example which it would do well to ponder over, as well as admire and (would we might hope so much!) learn to copy. The lesson, we regret to say, is sadly needed far beyond the precincts of Manchester. We may fulminate our vain invectives against quackeries, and pity and deplore the blind ignorance of an unknowing public which patronises them, and weep over the deep injury thereby inflicted upon our profession: we may do all this, and yet be all the while ourselves the chief promoting causes of the quackeries practised and the delusions swallowed. That we are so in the matter of homœopathy, at least, it would not be hard to demonstrate. Until members of the profession refuse to touch the foul thing called quackery—we mean, to touch it by associating themselves professionally with those who distribute the cheat to the public—we can hardly expect to see so lucrative a trade as is that of speculating and practising upon the credulity of the public fail. We say it—and without the slightest doubt of the correctness of the opinion—that whoever meets a homœo-quack in consultation is, in fact and in the eyes of the public, equally a practiser with him of the miserable delusion. In a moral point of view, his conduct is without excuse. Granted, the quack may, and we believe sometimes does, act conscientiously and as best he may, according to the light of his minute understanding; but what is to be said of him who, knowing and admitting that the whole thing is a gross farce —a degrading delusion practised upon the public— who, having no belief in the globulistic nonsense, stands by the sick-bed, it may be the death-bed of a patient, and shakes hands with the deception in the broad face of day! It is astounding to us how men can so juggle their consciences into a placid belief that they are all the while acting the part of honourable men. "Oh," they say, "this is a case in which the patient requires no medical treatment; let him, therefore, swallow none, in the shape of globules. Besides, if the patient should require physic, the homœopath never objects to a gentle allopathic (as he calls it) dose!" Yes! it is with such wretched sophistry as this that men who should be shining lights to their profession—*Ehrenbreitsteine*—pillars of honour—delude their consciences, degrade the profession, and assist in the spread of quackeries, *when glittering gold persuades.*

Let us cease, for decency's sake, to storm against quackeries, and to implore the legislature to defend us against the marauders who practise them, until we have purged our own body of alliance with the evil thing. To hear some men in our profession gabbling of its honour and its dignity is to hear Gracchi grumbling about conspiracies. Honour to the Manchester Medico-Ethical Association for making so bold and honourable a declaration! Perhaps that act may yet reach far beyond the limits of the Society's boundary. Perhaps it may be an example pregnant with greater good to the profession than its authors dreamt of. Indeed, ethical societies must not stop here; they must go one step further. They must declare before the profession that the man, never mind how high his professional status, who meets a homœo-quack at the sick-bed, shall be excluded from consultation by his brethren. This is the only way to cut the ground from under the quackery. So long as the quack and his patient know that they have always men of high professional standing to fall back upon—men who will come in *in extremis* and in difficulties, to help the quack out of his mire—so long will the public continue to have faith in homœopathic dogmata, and no longer.

THE BLIND.

A little essay on "The Blind," written by Mr. A. Mitchell, who is himself blind, gives us some interesting facts respecting this afflicted class of our community. It was written chiefly with the hope of throwing out useful hints for the social improvement of the blind.

The number of blind in the United Kingdom, according to the census of 1851, is nearly 30,000, the males and females being about equal in number. Those who are born blind, or lose their sight in early infancy, are a very small minority; being only about one in twenty of the whole number. They require a different mode of management from that which is suited to those who become blind later in life. Those who are born blind, we are told, are less sensible than others to their true position, and are often egotistical. Their physical courage surpasses that of their afflicted brethren; they traverse streets and pass along roads more boldly; but this from ignorance of the danger they run. They are less nervous in society, and will more boldly occupy conspicuous positions. Their hearing and touch is more acute; and they are often remarkable for their cheerfulness. Those who lose their sight in youth, or after years, possess mental advantages, which more than counterbalance these physical powers; for the vivid remembrance of the varied beauties of nature and art materially assists the imagination. Resignation is more or less manifested by the blind in general; they murmur not at the dispensation of the Almighty, but they too frequently have occasion to mourn in secret over the manifold sorrows and trials produced by the cold indifference or cruel prejudices of their fellow men. A want of combination among the blind deprives them of the power of organising any efficient scheme of reform. The rich are restrained by indifference, and the intelligent by self-interest, from taking the lead in any movement that might prove of real advantage to the entire body.

Egotism, jealousy, and suspicion, are the most prominent failings of the blind. Their egotism may be attributed to the foolish praise frequently lavished on them by their sighted friends; while their jealousy arises from the hopeless struggle which they have to maintain through life. Suspicion is traceable to the fact, that the blind are too often deceived, not only by society in general, but also by their nearest and dearest friends.

Their moral status, as a body, is equal to that of any other class of society. Many of the blind entertain an extraordinary reluctance to conceal any serious disfigurement occasioned by deformity of the eye, which might easily be disguised by coloured glasses. This feeling arises, no doubt, in most cases, from the delicacy or neglect of their friends and relations.

Mr. Mitchell, in his pamphlet, also gives a list of the different charities for the blind. He describes the general conditions of the blind; and then adds numerous suggestions for the improvement of their state.

THE WEEK.

The vacancy among the members nominated by the Crown in the Medical Council, caused by the death of Dr. Baly, has been filled up by the appointment of Dr. Sharpey, Professor of Physiology in University College, and one of the Secretaries to the Royal Society.

A few weeks ago, in commenting upon Lord Campbell's new Lunacy Regulation Bill, we insisted upon the mistake, which we considered his lordship was making, in appointing two medical men as Commissioners, who were to be allowed to continue in practice, and consequently to have small salaries. His lordship, we are glad to see, has wisely amended this point in his Bill. Instead of two medical visitors, one is to be appointed, who shall devote his whole time to the discharge of the duties.

The daily papers inform us that the *Faid Gihaad*—the filthy focus of the Egyptian plague, which has lately excited the curiosity of semeiologists and others—has been heard of even at Malta.

> "She had on board, besides her own crew, that of another Egyptian man-of-war, the *Faid Gihaad*, which she left at Liverpool to undergo certain alterations and repairs. During the voyage a great deal of sickness prevailed on board. According to one account thirteen, and according to another twenty-seven of the crew died on the passage. On her arrival here the master, Captain Lawson, three engineers, and one or two other persons, all Englishmen, were suffering from typhus fever. Several of the Egyptian sailors were also similarly attacked."

The history of this case reminds us of the Black Assize at Oxford, where judge, counsel, and jury succumbed; the prisoner, all the time, the contagion's centre, being (we must suppose) free from the fever which he was thus passing on to his judicial neighbours in court.

The following gratifying testimonial to the value of the services of a medical brother, John Hill, Esq., of South Cave, will be read with pleasure:—

> "A few evenings ago a very gratifying event took place at this village, which excited no small amount of interest. For some time past a number of the tradesmen, farmers, and others in South Cave and the adjacent places having organised themselves into a committee, have been soliciting subscriptions in their respective localities for the purpose of obtaining a piece of plate and a purse to present to John Hill, Esq., a medical practitioner highly popular in the district named, and every way worthy of the honour. At the close of the canvass, the subscription lists showed a sum sufficient to purchase a silver teapot and furnish a purse with one hundred pounds. The former article was procured at the establishment of Messrs. Jacobs and Lucas, Whitefriargate, and was most elaborately ornamented. It bore an inscription as follows:—'Presented, together with a purse containing one hundred sovereigns, to John Hill, Esq., M.R.C.S., by upwards of six hundred and forty of his friends in South Cave and the vicinity, in recognition of his unremitting attention as a medical man to the wants of the poor in his district during a period of 35 years. April, 1861.'"

Dr. Sandwith of Hull was chairman on the occasion.

From the Inspector of Prisons' last Report, it appears that, in Maidstone county gaol, boys of 14 and 16 were so flogged with a cat-o'-nine-tails as to be permanently marked.

> "I feel called upon to observe", he says, "upon the infliction of the punishment upon them with the cat-o'-nine-tails instead of the usual instrument, the birch rod, not only because it is contrary to the usual custom, but also because the enduring scars which are occasioned by the cat operate injuriously upon the individuals in after life, rendering them inadmissible into the army."

We trust our medical brethren, surgeons to gaols, will do their best to discourage such barbarity. The injuries from flogging must, we should suppose, have been of a kind to bring the injured lads under the hands of the medical officer of the gaol.

In the regulations now framing for the management of the Imperial Army in India, we find the following item:—

> "The Indian Funds, the Military or Orphan and Medical Retiring Funds, are to be abolished. As soon as existing interests terminate no newly appointed officers will be allowed to subscribe to them; but those now contributing, or having a right to contribute, will have all their privileges preserved, the Government receiving the subscriptions, and making the disbursements after the same rate and manner as if there had been no amalgamation."

New York, which has lately distinguished itself by its anti-free-trade notions in the matter of importation of foreign manufactures, is, we are surprised to find, far ahead of the old country in the matter of liberality in the practice of medicine. The *American Medical Times* tells us:—

> "That the Homœopathic College of New York has a charter from the state, and by its diploma places its graduates upon the same legal footing as those of our best schools."

The journal goes on to say:—

> "The Homœopathic College recently held its commencement, on which occasion the president gave the following significant charge to the graduates. 'You need not stick alone to homœopathy; if that will not cure, try allopathy. If allopathy fails, try hydropathy; and if you are not then successful, adopt spiritualism, or any other curative means that may be at hand.'"

We recommend this highly advantageous condition of the globulistic practice in New York to the attention of all the various quacks in this kingdom. None *need* despair, it is evident, whatever their creed, of attaining to the honour of charterdom in Yankee-land.

Lord Rosse is famous for his telescope; and Mr. Ross, following worthily in the steps of his father, is famous for his microscope. The former dissected out the ninety nebulæ for us, and turned out of the confusion good honest fixed stars; and, if what we hear is correct, Mr. Ross's ingenuity may perhaps enable the skilled observer to perform something of this same dissecting operation on what we are at present pleased to call ultimate tissue-structures; and thus the widening of the macrocosmic may perchance be followed by an extension of the microcosmic horizon. At the request of Dr. Lionel Beale, Mr. Ross has lately produced the highest power of lens ever yet obtained. Hereby Dr. Beale has been enabled to investigate matter with a power of one-twenty-sixth of an inch! How if we all have to go to school again, in consequence of this high microscopic power? Who knows what is to become of the *elementary* (?) structures of the human frame when subjected to this unwonted force? Are the striæ of muscles, for instance, as we now see them, mere nebulæ, decomposable by this potent spirit into some more wonderful forms? However this may be, the best thanks of the profession are due to Dr. Beale for the energy with which he has long been working in this deep and hidden region of anatomy.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. General.	York House, Bath.	Thur. April 25, 6.45 P.M.
South-Eastern. Annual.	Crystal Palace.	Wed., May 8, 3 P.M.

Seals and Whales. "The pursuit of the seals and cetaceans by the civilized races of Europe and America, carried on with systematic perseverance and the appliances of science, must eventually drive these animals from their more accessible haunts to the extreme recesses of the polar area. Already the formerly highly productive seas of Spitzbergen and Davis's Straits are almost fished out, and the inlets and channels in the *Meta Incognita* Archipelago have been invaded by the whalers. At present the *Meta Incognita* islands are among the most densely-peopled Eskimo areas; but should the seals and whales, which are eagerly pursued there by Europeans, be driven to remove elsewhere, the natives, after much suffering, must also abandon their ancient seats." (*Sir J. Richardson.*)

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, April 9th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

OBSERVATIONS ON THE GROWTH OF THE LONG BONES AND OF STUMPS.

BY G. M. HUMPHRY, M.D., F.R.S.

The *first* part of this paper gave the results of some experiments with madder upon the bones of pigs with reference to the mode of growth of the bones in length. They were confirmatory of the observations by Hales, Duhamel, Hunter, and others, that the elongation is effected by addition at the ends of the shafts, the addition being effected by growth and ossification of the epiphysial strata of cartilage on the side next to the shaft. The experiments further showed that the growth at the two ends of the shaft is unequal; that it is usually most rapid at the larger end of the bone; and that it is always the most rapid at the end where the epiphysial cartilage remains latest—that is to say, the growth proceeds most rapidly at the end where it is longest continued. The proper relation of the soft parts to the bone during the periods of growth is maintained by the interstitial growth of the periosteum, and by the continual sliding or shifting of that membrane upon the bone towards the end at which the growth is most rapid. This is attended with a certain traction upon the medullary and other vessels, and determines the direction of the canal for the medullary artery, which is always slanted towards that epiphysis which is last ossified to the shaft; in other words, towards that epiphysial line in which growth proceeds most quickly. The amount of growth in the respective epiphysial lines is very determined, and corresponds exactly on the two sides of the body, though that on the one side is not affected by the other; and it appears to regulate the amount of growth of the soft parts; for if it be either arrested or accelerated, the growth of the soft parts is affected in a similar manner.

In the *second* part of the paper the author showed the common impression, that a stump keeps pace with the rest of the body in its growth, to be erroneous. He did this by measurements taken from persons who had undergone amputation in childhood, and by experiments upon animals. The rate of growth varies. The stump rarely maintains its relation to the corresponding segment of the other limb; and it fails to do so, as might be expected, most markedly in those parts in which the growth of the bone takes place chiefly at the lower end. Thus, if amputation in the thigh be performed, on a young child, one-third from the lower end, the stump, when full growth has been attained, will not be more than a third as long as the other thigh; its relative length will have thus been altered from two-thirds to one-third—that is, it will not have grown more than half as fast as the other thigh. The information derived from the measurements of stumps was thus shown to be quite corroborative of the observations made, in the first part of the paper, respecting the growth of the bones at their epiphysial lines. The instances in which the bone of a stump elongates so as to be troublesome and require a portion to be removed, are regarded by the author as quite exceptional, the phenomenon being probably due to some irritation, and being, therefore, of the same nature as the spicules and exostoses which are occasionally found upon stumps and on other parts of the skeleton.

ON THE ACTION OF CHLOROFORM. BY A. ERNEST SANSOM, M.B. LOND.

The author stated the various hypotheses as to the mode in which the anæsthetic exerts its influence. The majority of writers attributed to it a special elective affinity for the nervous system, with which it is brought in contact by the circulation—a direct power of paralysing, in greater or less degree, the various functions of the brain. The later researches of Faure and Gosselin—who have applied chloroform to the brain, both directly and by the medium of the circulation, without producing unconsciousness—shook these hypotheses to their foundation. The late Dr. Snow was greatly impressed with the notion that anæsthesia stood in a direct relation with imperfect oxygenation of the blood; and facts seem to point more and more strongly to this conclusion. The analogy between narcotism and apnœa is one that has not failed to present itself to the minds even of those who looked on chloroform as a special nerve-poison; and the production of anæsthesia by the causes of apnœa is of the most constant occurrence. As to the mode in which this deficiency of oxygenation is brought about, no satisfactory explanation has as yet been given; and authors have been fain to avail themselves of the unsatisfactory word "catalysis." If the suspension of hæmatosis by the vapour of chloroform be a direct action, it must be effected either by an impediment produced to the endosmosis of oxygen through the respiratory apparatus, or by a special action upon the blood itself. Faure's theory is, that chloroform-narcotism is induced by a caustic action upon the lungs—that chloroform never produces its effect by absorption; but this is rebutted by experiments, which have shown that hypodermic injection of chloroform will produce anæsthesia.

The author then adduced certain observations as to the action of chloroform upon the blood: how it modifies coagulation, and how its presence in very small quantities is sufficient to stamp a characteristic appearance upon the clot. He brought forward a number of experiments which he had performed upon non-circulating and upon circulating blood, and hoped that they would contribute towards the more perfect knowledge as to the action of the anæsthetic. His conclusion was, that cloroform exerts a caustic action upon the proteinous cell-wall of the blood-corpuscle; this action being manifested in the following progressive manner:—

1. Corrugation of cell-wall; alteration of shape.
2. Coherence of corpuscles.
3. Coalescence of cell-contents; an actual solution of the corpuscles.

Instant stasis of circulating blood is effected if fluid chloroform permeate the living walls of the vessels. The circulation in the web of a frog's foot, as seen by the aid of the microscope, is thus modified by anæsthetising the frog by the vapour of chloroform.

1. Increase of velocity of circulation.
2. Dilatation of arteries and capillaries.
3. Decrease of velocity of circulation.
4. Alteration of cell-walls of corpuscles; coherence.
5. Interruption by cohering masses to capillary circulation.
6. Stasis of the blood.

The enlarged capacity of the arterial system and the decrease of the velocity of the circulation accounted for the anæmia of the brain observed during narcotism. (*American Journal of Medical Science*, Oct. 1860, p. 400.)

The author summed up his conclusions as follows:—

1. Chloroform-narcotism is due to the imperfect stimulus to the vital functions of a mal-oxygenated blood.
2. This mal-oxygenation is due to the direct influence of the vapour of chloroform upon the blood, and especially upon the blood corpuscles.
3. The vapour acts caustically on the cell-walls of the blood-corpuscles, and thus impedes the endosmosis of oxygen.
4. If the blood be so deteriorated as to supply an insufficient stimulus to the heart, death is by syncope; whilst if stasis be primarily effected in the lungs, death is by apnœa.

MEDICAL SOCIETY OF LONDON.

Monday, April 15th, 1861.

William Coulson, Esq., President, in the Chair.

CONGENITAL PHIMOSIS CONSIDERED AS A FREQUENT CAUSE OF IRRITATION OF THE URINARY ORGANS IN YOUNG CHILDREN: THE IMPORTANCE OF ITS EARLY RECOGNITION AND REMOVAL. BY P. C. PRICE, ESQ.

Congenital phimosis, it was observed by Mr. Price, is as yet scarcely recognised as a cause of vesical irritation in children. Sir Charles Bell has alluded to incontinence of urine in boys; but has failed to notice the cause. The subject has also been passed over in silence by Guthrie, Canton, etc., and alluded to only in a cursory manner by Gross. Mr. Coulson, however, had described cases in children in which the symptoms of calculus were present, and were removed by the cure of a congenital phimosis. The connection has also been recognised by a few other surgeons.

The most common results of congenital phimosis in young children were then enumerated and commented on. They are the following.

1. Preputial obstruction to the flow of urine, and the more or less permanent retention of this secretion. The tightness of the prepuce, and the retained secretion of Tyson's glands, may produce irritability of the bladder; the urine, however, being discharged from the urethra more rapidly than it can escape from the narrow orifice of the prepuce, is retained between the latter and the glans, and may give rise to inflammation and even to extravasation. The only remedy for this condition is to slit up the prepuce, so as to allow the pent-up urine to escape.

2. Constant irritation of the glans penis and urethra is one of the most usual results. This may be so intense, as to give rise to severe constitutional derangement, even in otherwise healthy children: and Mr. Price had seen a case in which the mental as well as the bodily health was affected.

3. Vesical irritation, accompanied with incontinence or retention of urine, is probably produced by reflex irritation. Incontinence of urine most frequently occurs, and is very obstinate, unless the cause be recognised. In retention, which is not uncommon, the difficulty is increased by the child's pulling the prepuce. The use of a catheter is seldom or never necessary, but the warm bath is serviceable in removing the temporary difficulty.

4. Congenital phimosis sometimes gives rise to hypertrophy of the muscular coat of the bladder, associated with symptoms bearing a close analogy to those of catarrh and calculus vesicæ. So analogous are the symptoms to those of stone, that Mr. Price had known boys with congenital phimosis to be on the point of having lithotomy performed on them.

5. Pain and swelling of the testis have also been observed to attend congenital phimosis.

It is scarcely the mere elongation of the prepuce that produces the mischiefs here described. It will generally be found that the mucous membrane of the foreskin is more or less adherent to the glans; and that it is this, and the retention of the secretion of Tyson's glands, which usually produce the irritation. More than one modern writer has said that slitting up and cutting off a portion of the prepuce is not sufficient, and has therefore recommended subcutaneous section of the mucous membrane. The only plan, however, of curing the phimosis, is to slit up the prepuce, cut away a portion, remove the adhesions, and stitch together the cut edges of the skin and mucous membrane. Mr. Price then proceeded to describe the operation which he usually performs.

The prepuce being put on the stretch, so as to remove the orifice as far as possible from the glans, the blunt-pointed blade of a pair of scissors is passed through the preputial orifice to about a quarter to half an inch towards the corona glandis, and the prepuce is divided through its upper surface. This allows the glans to be seen covered, in all probability, especially if the phimosis be congenital, by the mucous membrane of the foreskin, which will be found more or less tightly adherent to the glans. The scissors being laid aside, this adhesion is to be separated by somewhat forcibly retracting the back portion of the prepuce, and, by means of the thumb-nail, breaking through such points as may be more than usually firm. Around, the fossa in front of the corona glandis, will usually be found small patches or masses of hardened and otherwise altered secretion of the odoriferous glands. These being removed, the scissors must be again employed, and such portions of the redundant skin and mucous membrane cut away as will allow the glans penis, after the edges of the wound are united, to remain uncovered. In removing the necessary portions of integument, the author generally contrived, by shaping the incision somewhat obliquely from above downwards, to avoid wounding the artery of the frænum; whereby there is little risk of secondary hæmorrhage and infiltration of the loose tissue with blood—a result which he had frequently known to prove troublesome, and for a considerable time, to retard the healing process. If, however, it be desirable to loosen the connexions of the mucous membrane with the glans at the frænum, instead of dividing the little artery which runs in this position, it is better to separate with the scissors the union of the frænum with the glans immediately in the line of junction, by which means the course of the vessel will be avoided. Mr. Price, although some authors do not follow the practice, is in the habit of keeping the mucous and cutaneous surfaces in contact by sutures, unless the patient, on whom the operation is performed, be very young. Sutures of the very finest silk are to be preferred to those in ordinary use, and made either of the same material or of metal, as they cause less irritation, and do not need removal ere their destruction is effected in the course of a few days, by reason of the contact of the healing or other discharge. To prevent the urine for the first few hours after the operation from excoriating the edges of the wound, it is advisable to smear them with oil or cerate.

In performing such an operation less danger will be run of wounding the glans penis, a result which the author has known to occur when the bistoury has been used. It must be recollected that to obtain complete relief from a congenital phimosis, a mere slitting up of the elongated prepuce will not generally suffice, but a certain portion of the mucous and cutaneous tissues must be removed.

A Hint for Colonel Jebb. A new mode of punishment has been adopted at the New York State Prison. The hair of criminals is closely shaven, except a tuft on the top of the head, which is called the "Japanese comb." The ridiculous appearance produced makes the prisoners consider it a severe punishment. If the object of punishment is the reformation of criminals, we have but little faith in the ordinary methods of its administration in our prisons. Such punishments as the above, and the half-drowning process of the "shower bath," look more as if done by the jailors for amusement, or to satisfy a fondness for vindictive cruelty. (*Med. and Surg. Reporter.*)

Correspondence.

ON SUPPORTING THE PERINÆUM.

Letter from Edward W. Murphy, M.D.

Sir,—The interesting "practical observations" of Dr. Graily Hewitt "on supporting the perinæum" lead me to offer a few remarks on the same subject, more especially as I fear that in my published lectures I may not have been sufficiently explicit. Dr. G. Hewitt observes, "Dr. Murphy says the object in view is 'to obviate the effects of too violent distention;' but he gives no further explanation of the *modus operandi* of the procedure." It is my wish to supply this deficiency.

The whole action which takes place by which the womb is opened, the child forced through the pelvis, the perinæum expanded and the head expelled, may be considered as a struggle of opposing forces. The tissues of the cervix uteri, the bones of the pelvis, the tissues of the perinæum, are the resistance: the muscular power of the uterus, the overcoming force.

But such a struggle must not be considered merely as a question of dynamics; the action is vital, and every provision is made so to regulate it as to prevent injury. Thus, when the tissues of the cervix are to be dilated, the power of the uterus is kept under control by the liquor amnii; and if it escape by the suspension of its action, if the force of the pains excite irritation, every means are used to prevent the expulsive force of the uterus from suddenly expanding, or rather tearing through the tissues; nevertheless the cervix is frequently torn by the violence of the pains. So with regard to the perinæum, if the membranes be entire, the most gradual and least irritating force expands it; if not, and the head descend, its pressure is only continued during the pain; when that ceases, the head retreats, and the irritation is removed.

Thus the expansion proceeds, the tissues becoming thinner and thinner; and although they are sometimes so attenuated, that the head seems to press down almost into the world, yet it will again retreat until the next pain, the parts not being yet prepared to yield.

The practitioner is often disappointed by this delay, and uses every effort to prevent a repetition of it; he, therefore, endeavours to direct the head forwards towards the pubes, and thus to force it over the perinæum. I am not quite sure that this practice does not frequently cause slight laceration. But why does the head retreat when the perinæum offers such little resistance? Because *the act of dilatation* has not taken place.

The tissues of the cervix uteri and the perinæum both possess a power of expansion independent of the force employed against them. Both may be dilated suddenly and unexpectedly, and either may offer an obstinate resistance.

When this act of dilatation takes place, the head passes safely over the perinæum; if it should not, there is always the risk, if not the certainty, that if the head be forced into the world, the perinæum must be torn, and this whether it be thick and resisting, or thin and apparently yielding. Cases have occurred in which the tissues have been so expanded, that the head has been forced through the perinæum, without the margin yielding in the least.

Hence in the management of the perinæum, so as to save it from injury, the question arises—What prevents this act of dilatation taking place? The leading causes which interfere with it, seem to me to be congestion and inflammation. If irritation be excited, congestion takes place, and the action is arrested; if inflammation take place, the perinæum becomes still more unyielding. It remains, then, to determine whether these unfavourable results are more likely to occur when the perinæum is supported by the hand of the practitioner, or if it be left to itself. There are very few cases in practice where the perinæum is completely unsupported during the expulsion of the head, unless indeed in those instances of sudden expansion where the head is expelled by a single pain. It is impossible, therefore, to draw a comparison by quoting cases, but some conclusions can be formed by observing the symptoms which present themselves in an ordinary labour, when the perinæum is being dilated.

No pains are so agonising as these: the support of the hand relieves the patient; she is conscious that her labour is assisted; at no period are the services of the practitioner more earnestly acknowledged. It is fair, therefore, to infer that this support relieves the irritation; so also it diminishes congestion, as pressure on distended vessels always does.

If such, then, be the case, the support of the perinæum is essential, in order to prevent those causes coming into operation which interfere with the act of dilatation.

But besides this, the action of the uterus and that of the perinæum do not always correspond; the one may resist the other, and the pains are sometimes so powerful as to tear through the perinæum, even when most carefully supported.

What the result would be, when not assisted, may be decided by those cases where from some accidental cause the support is withdrawn. One of the worst lacerations that ever came under my notice arose from the patient, an extremely excitable person, suddenly withdrawing herself during a violent pain; the perinæum was deprived of its support, and was torn quite through. Every practitioner of experience can readily bring to his mind such cases.

Hence the support of the perinæum is not alone for the purpose of allaying irritation and diminishing congestion, but also to counteract too violent distension from the action of the uterus. It is true that pressure so employed can never absolutely resist such powerful force, but it can controul it, can moderate the power, and alter its direction.

Thus the pressure of the head forwards directs the force of the uterus towards the vulva and from the perinæum; but in doing so, caution is necessary, lest the head be forced over the perinæum before it is prepared. The rule to direct the head forwards is of value when the principle is understood, but most mischievous when it is not. It is one thing to assist in directing the force of the uterus from the perinæum towards the vulva, but a perfectly different procedure to endeavour to force the head over a perinæum not prepared to yield. This latter practice is, I fear, too frequently adopted, and causes many lacerations. Hence in my lectures, I have stated that the object of supporting the perinæum was to prevent its too violent distention by the action of the uterus, not for the purpose of forcing the head forwards.

The object of supporting the perinæum seems to me to be twofold. First, to prevent or allay irritation and to diminish congestion, so that the act of dilatation may not be interfered with. Secondly, to counteract too violent action of the uterus.

The latter cause I have only referred to in my lectures, and the subject was left thus far incomplete; I have ventured, therefore, to trespass on your indulgence to allow me to supply the deficiency.

The only point on which I cannot agree with some of my colleagues on this practice, is the rule to press the head forwards over the perinæum; I have omitted this because it is so constantly misunderstood and adopted as a means of concluding more rapidly a labour that may have been tedious. Forcing the head over a perinæum unprepared is just as likely to cause its laceration as drawing it back, or leaving it to itself unsupported.

I am, etc., Edward W. Murphy.

59, Upper Berkeley Street, Portman Square, April 8th, 1861.

MR. ROBERTON AND THE MANCHESTER MEDICO-ETHICAL ASSOCIATION.

Letter from John Roberton, Esq.

Sir,—The readers of your Journal last week must have seen with some astonishment certain resolutions and letters forwarded to you for publication by a Committee of the Medico-Ethical Association of Manchester, the object being to inflict on me an offensive notoriety for having met in consultation a homœopathic surgeon. As the Committee do not attribute this act of mine to any selfish motive, the course they have taken is most assuredly a singular one; nor should I at all have apprehended its meaning, had not one of them told me that for a medical man under any circumstances to consult with a homœopath is, in a professional sense, "the unpardonable sin".

The impulsive manner in which these gentlemen have acted in this matter reminds one of an amusing anecdote in Addison's *Freeholder*. During the Rebellion of 1715, just before the battle of Preston, the author tells us a body of cavalier forces was seen marching for the North, when some kind of game chanced to cross the road, and instantly the commander and most of the officers, clapping spurs to their horses, with whoops and holloos, galloped after it quite heedless of consequences. Just so was it with the Committee. The Secretaries having heard of my consulting with a homœopath, a meeting was at once summoned; and though I endeavoured to calm the excitement by stating to the members the reasons that had induced me to act as I did (which need not here be repeated), but especially this, that the patient's husband being my near relative, the consultations in question were unavoidable, unless I had put aside every consideration of kindness and humanity, which, of course, I did not feel inclined to do. All I could say, however, availed nothing—it was not listened to: the game had started, and the Committee were eager for the pursuit. Your readers know the issue.

The cavaliers, we may suppose, returned from their equestrian hunt animated and refreshed, for to them it was a customary pleasant diversion; but it has probably been otherwise with our Medico-Ethical Committee, who must feel, I imagine, some misgivings lest this their novel ungenerous sport should call for the disapprobation of their brethren. I deeply regret that so strange an exhibition of unkind feeling has happened in our neighbourhood. For myself, I can say that, during a very long professional life, few if any have had less discord with those in the same walk than I; and, indeed, it is well known that nowhere in the kingdom does concord and good feeling more prevail among the members of our profession than in Manchester, and so I trust it will ever continue. If these proceedings of the Committee appear in some degree to furnish an exception, it is, I feel persuaded, a cloud that will soon pass. But, should good humour be not speedily restored amongst us, as I anticipate, it will not be the fault of

Yours, etc., John Roberton.

Manchester, April 15th, 1861.

Test for Grape-Sugar. Mulder gives the following as the best way of using his test for the discovery of grape-sugar: A little of the sulphate of indigo solution is placed in a test-tube, the fluid to be tested is added, and the mixture is boiled. A solution of carbonate of potash or soda is then added until the liquid is alkaline. If grape sugar be present the mixture is decolorised; if not, it remains blue. (*Chemical News.*)

Medical News.

Royal College of Physicians of London. At the Comitia Majora, held on Monday, April 15th, 1861, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Booth, John Gregory, Padiham
Brooks, Bransby, Henley-on-Thames
Davey, Alexander George, St. Bartholomew's Hospital
Ellam, John, Sneinton, near Nottingham
Ewens, John, Milton Abbas, near Blandford
Foulds, Samuel, Staveley, near Chesterfield
Granville, Joseph Mortimer, Bristol
Jones, Philip W., Wakefield
Mead, George Berwick, Newmarket
Middletou, John William, Westminster Hospital
Pilkington, William Henry, Enfield, Accrington
Rayner, Thomas, M.D., Manchester
Savage, Thomas, Birmingham
Scott, Henry Thomas, 7, Bedford Place, Old Kent Road
Thompson, Charles. Leicester
Turton, Frederick, Wolverhampton
Woodward, William, Worcester

Royal College of Surgeons of England. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on April 10th. [Those gentlemen with an asterisk prefixed to their names have also passed the preliminary examination for the Fellowship of the College.]

Angier, George Augustus, Ipswich
Dollman, John, Birmingham
Ellis, Heber Dowling, Gloncester
Fenn, Edward, Ardleigh, Essex
Hartell, William Henry, Willenhall, Staffordshire
Howell, Horace Sydney, Ladbroke Square, Notting Hill
Kenning, Edward, Morivenslaw, Cornwall
Langton, John, Denmark Hill
Lemon, Henry Morris, Welshpool
Macaulay, Francis Edwin, Sheffield
*Maurice, James Blake, Marlborough, Wilts
Oliver, Richard, Shrewsbury
Parker, Duncan, Clopton Hall, Suffolk
Pennington, Abel, Warrington, Lancashire
Skrimshire, John Truscott, Holt, Norfolk
*Stone, William Domett, Lincoln's Inn Fields
Thorp, Sidney, Huntingdon
Walker, Bernard. Sheffield
Watson, Forbes, Nottingham
Wollaston, Thomas Galston, Shrewsbury

At the same meeting of the Court—

Fairbairn, William Christopher, of Greenwich Hospital, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College of Surgeons.

The following gentlemen were admitted on April 11:—

Bell, James Vincent, Rochester
Brown, John Woodruffe, Wymeswold, Loughborough
Caldwell, Samuel John Barry, London
Carter, Edward Hunt, Billericay, Essex
Curme. Decimus, Dorchester
Davy, Humphry, Penzauce, Cornwall
Dudfield, Thomas Orme, Gloncester
Ferris, John Andrew, Calcutta
Finch, Henry, Newnham Crofts, near Cambridge
Foster, Philip, Leeds
Fowler, James. Winterton, Lincolnshire
Gardner, Sebastian Claude Thomas, Highgate
Goldsmith, George Pocock, Brompton
Greenwell, Baker, Queen's Terrace, St. John's Wood
Harding, John Richard, Welbeck Street, Cavendish Square
Hensman, Frank Henry, Kimbolton, Hunts.
Langworthy, William Froude, Modbury, Devon
Matthews, William, Walsall, Staffordshire
Payne. William, Wallingford, Berkshire
*Powell, William, Dalston
Smart, John Naish, Bedminster, Bristol
Sutcliffe, Henry, Heptonstall, Yorkshire
Thomas, David Bowen, Newcastle Emlyn
Watson, William, Ledberg, Yorkshire
Whitmarsh, William Michael, Chippenham, Wilts
Wright, Thomas Poyntz, Tiverton, Devon

APPOINTMENTS.

Coates, Charles, M.D., elected Physician to the Bath United Hospital.
Murchison, Charles, M.D., appointed Physician to the London Fever Hospital, in the room of A. Tweedie, M.D., resigned.
Murray, J. Jardine, Esq., appointed Assistant-Surgeon to the Brighton Eye Infirmary.
Noott, William F., M.D., elected Physician to the Queen's Hospital, Birmingham, in the room of the late M. F. L. Andrews, M.D.
Sharpey, William, M.D., Sec. R.S., appointed, by the Queen, a member of the General Council of Medical Education and Registration, in the room of the late W. Baly, M.D., F.R.S.
Taaffe, R. P. B., Esq., appointed Surgeon to the Brighton Eye Infirmary.
Tweedie, A., M.D., F.R.S., appointed Consulting Physician to, and Vice-President of, the London Fever Hospital.

Royal Army. The following Staff-Surgeons at Fort Pitt Hospital are ordered by the Director-General to proceed to the undermentioned stations forthwith:—

Adams, Robert, M.D., to Aldershot.
Alcock, Nathaniel, Esq., to Portsmouth.
Fazdowski, B. J., M.B., to Aldershot.
Gillespie, Franklin, M.D., to Dover.
Heath, Robert E., M.D., to Dover.
Hope, Samuel, Esq., to Aldershot.
Jones, W. H., M.D., to Colchester.
Lawlor, D. W., Esq., to Dublin.
Lever, R. C., Esq., to Aldershot.
Maunsell, Thomas, Esq., to Great Yarmouth.
Quinlan, Patrick, Esq., to Portsmouth.
White, S. G., M.D., to Parkhurst.
Wilson, F. R., M.B., to Plymouth.

Royal Navy. The following appointments have been made:—

Burley, F. B., M.D., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.
Dann, Edward, M.D., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.
Dubuc, Emilius W., Esq., Acting Assist.-Surgeon, to the *Cossack*.
Graham, William, Esq., Acting Assistant-Surgeon, to the *Impregnable*, for Plymouth Hospital.
Jenkins, Jas., Esq., Surgeon, to the Plymouth Division of Marines.
Mulcaby, Edward, Esq., Acting Assistant-Surgeon, to the *Impregnable*, for Plymouth Hospital.
Nelson, Robert, Esq., Acting Assistant-Surgeon, to the *Victory*, for Haslar Hospital.
Shepherd, Charles D., Esq., Surgeon, to the *Imaum*.
Thomson, William J., Esq., Acting Assistant-Surgeon, to the *Impregnable*, for Plymouth Hospital.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Clarke, E., Esq., to be Surgeon Worcestershire Yeomanry Cavalry.
Dewar, W., M.D., to be Surgeon 1st Fife Mounted R.V.
Dunn, C., Esq., to be Surgeon 3rd Administrative Battalion Hampshire R.V.
Hoare, W. P., Esq., to be Surgeon 1st Brigade Kent A.V.
Rodwell, G., Esq., to be Surgeon 2nd Administrative Battalion Norfolk R.V.
Wills, J. M., Esq., to be Assistant-Surgeon Royal Monmouthshire Militia.

To be Honorary Assistant-Surgeons:—

Dickin, W. A. P., Esq., 5th Montgomeryshire R.V.
Gamble, S., Esq., 9th Cambridgeshire R.V.
Griffith, T. D., M.D., 1st Anglesey R.V.
Mackie, J. W. R., M.D., 1st Fife Mounted R.V.
Smith, J. G., M.D., 11th Aberdeenshire R.V.
Smith, R., Esq., 5th Elginshire R.V.

BIRTHS.

Cornwall. On April 12th, at Ashcott, Somerset, the wife of *John Cornwall, Esq., of a daughter.
Logan. On April 12th, at Kettering, Northamptonshire, the wife of *James Logan, M.D., of a son.
Terry. On April 17th, at Northampton, the wife of *Henry Terry, jun., Esq., of a daughter.

DEATHS.

Arden, Christopher, Esq., Surgeon, at Dorchester, aged 73, on April 6.
Fox. On April 10th, at Brislington, near Bristol, aged 81, Isabella, widow of the late Edward L. Fox, M.D.

Anatomical Pun. Why is the ulna sometimes called the "*funny bone?*"—Because it is so near the *humerus*. (*Vanity Fair.*)

Consumption of Ardent Spirits. On Saturday, a return to Parliament was printed, showing that last year the duty paid on ardent spirits amounted to the sum of £9,702,807 : 3 : 9.

The Jardin des Plantes, in Paris, is about to be greatly enlarged by important additions being made to it from the Bois de Vincennes, which has become the property of the city of Paris.

The Constitution of Scammony Resin. The researches of H. Spirgatis confirm the results obtained by Mayer, and also by Kosman, which proved the identity of the composition of the resins of scammony and jalap $C^{68}H^{56}O^{32}$. (*Chemical News.*)

Deterioration of Egyptian Wheat. A report has been recently presented to the Paris Academy of Sciences on the deterioration of Egyptian wheat which has been going on during recent years. The causes are stated to be the want of new seed, and the bad quality of the land selected for sowing wheat.

Civil List Pensions have been granted (amongst others) £50 to Mrs. Henfrey, on account of her husband's (the late Professor Henfrey), contributions to anatomical and physiological botany. £50 to Mr. Curtis, F.L.S., in consideration of his scientific attainments and the merit of his works upon entomology, etc., and of the injury to his sight from his literary labours.

Health of the Army. At the last inspection of the battalions in Colchester Camp, especial attention was given to the hospital and the condition of the invalids, and it was a matter of congratulation that the sanitary state of the camp was so good, the men in hospital not exceeding four per cent. upon the entire strength of the camp.

The Income Tax. At the Statistical Society on the 16th inst., Mr. Sarjant read a paper on the Income Tax. The author maintained that it was a crying unfairness that the trader, the professional man, and the holder of a short annuity, should each pay the same as the landholder and the fundholder, whose incomes were permanent.

Organisms contained in Water consist of animalculæ and animals of a larger size. We have in the New River water twenty-six species of these animals, in the Thames water twenty-nine species, and twenty-four species have been detected in the West Middlesex water, and so on, varying in number, in different waters. (*Dr. E. Frankland.*)

Influence of Solar Spots on the Magnetic Needle. Late observations prove that the magnetic needle experiences a daily average oscillation which increases or diminishes with the number of solar spots; whence M. Hansteen has endeavoured to fix the period of these spots at eleven years; but a sufficient number of years has not yet elapsed to enable us to verify the assertion.

A New Canadian Dye. Professor Lawson has prepared a new dye of great richness, in the Laboratory of Queen's College, Canada, from an insect, a species of *coccus*, found for the first time last summer on a tree of the common black spruce (*Abies nigra*, Poir), in the neighbourhood of Kingston. This new dye closely resembles true cochineal, a most expensive colouring matter capable of being produced in warm countries only. (*Chemical News.*)

Vaccination. The *Gazette* contains an intimation from the Privy Council-office that the Royal Public Dispensary of Edinburgh is henceforth recognised by the Privy Council as an Educational Vaccination Station, for the purposes of an order of December 1, 1859, for the conduct of educational vaccinating stations in England; and Dr. Husband, officiating at the Royal Public Dispensary as public vaccinator, is henceforth authorised to give certificates, for the purposes of the order, to persons whom he, at the said station, shall have instructed or examined in vaccination.

The Livingstone Expedition. Letters have been received in Glasgow, by a gentleman, from Dr. Livingstone, the last communication being dated Feb. 6. The expedition had safely penetrated into the interior of Africa, and intercourse had been freely had with the natives. After remaining for some time prosecuting their search, they returned to the coast, and at the last date had arrived at the mouth of the Kongone, where their small steamer from England met them. All were well.

Civil Service Estimates. Under the head of education science, and art, the statement of the estimates for 1861-2, includes the subjoined items:—Public education, Great Britain, £803,794; science and art department, £111,484; public education, Ireland, £285,377; commissioners of education, Ireland (office expenses), £1275; University of London, £4995; universities, etc., in Scotland, £16,285; Queen's University in Ireland, £2336; Queen's Colleges, Ireland, £4800; Royal Irish Academy, £500; scientific works and experiments, £6620; Royal Geographical Society, £500; Royal Society, £1000. The increase under this head, as compared with last year, is £30,584.

A Taliacotian Operation! In the *Life and Opinions of Sir C. J. Napier*, by Sir W. Napier, Sir Charles says: "Hunter (General) who is here, told me a curious thing. Showing me a large sword, which cut off his arm at Burthpoor when leading the assault, he said, that on the rampart, a giant in complete armour, whirling this sword, met him. Hunter held up his sword in defence, but, to use his own words, the giant sent it with a *whirr* into the air. Hunter then held up the scabbard, but the blow went through it and his arm, just below the elbow, leaving merely *a bit of skin uncut*. He fell sitting, and held his severed arm in his right hand, while an officer tied a sash above the wound to stop the hæmorrhage; then a surgeon came up, put the *two ends together* and tied them, *and they united*."

Drugs from Siam. The balsamic resins of Siam deserve attention. The betel nut is extensively cultivated, to be used as a stimulant; and so is hemp, for the sake of its intoxicating and narcotic qualities, it being used in the preparation of "guncha," which has the sane effects as opium; but a considerable quantity of opium of inferior quality is produced in the tributary provinces of Siam, on the China border. Elephants abound in the interior of Siam. The hides are sent to China, where, having undergone a process similar to that of obtaining gelatine, they are considered a delicacy. The horns of the rhinoceros are said to possess medicinal virtues. The Chinese likewise attach fanciful virtues, medicinal and invigorating, to the bones of tigers and crocodiles, and the hairy-covered young horns of the deer.

University of Cambridge. Rumours are in circulation respecting the health of the Rev. John Stevens Henslow, Professor of Botany. He is now at his rectory, Hitcham, in Suffolk, in a state which forbids hope of recovery. He has taken a most affectionate leave of his school teachers and village botany class, and others with whom he has held kindly intercourse. Dr. Fisher, who for nearly sixteen years has discharged with ability his duties as physician to Addenbrooke's Hospital, announces his intention of resigning the office at Midsummer, partly because other avocations require his whole attention, and partly because he is of opinion that some other physician ought to have the opportunity of reaping the advantages afforded by so extensive a field of practice. The election of his successor will take place on the 13th of next month. Dr. Bayes, a follower of Hahnemann, has started as a candidate. It is expected that the whole hospital staff will resign in a body in the event of Dr. Bayes being placed at the head of the poll.

A Spanish Hospital. The Hospital de la Princesa is much smaller, but is far better arranged than the General Hospital of Madrid; the arrangement being the same as at Lariboisière in Paris and in the Bordeaux Hospital, although on a smaller scale. It may be said to consist of separate hospitals, with a garden between each two of them, and with a covered walk connecting them together at one end. This covered walk passes around a courtyard, in which is the chapel. The chapel is a much more important item in Spain than in France. The wards were all exactly similar, each with twenty beds. In one which I entered there was a woman chanting a monotonous prayer or litany. There were *baths* here just as at home. This is an astonishing thing for Spain; but the greatest wonder of all was the shower-bath, which had a room to itself and seemed (to judge from the complication of the arrangements) to have been just invented by some Spanish genius, and not yet simplified by their practical men. The hospital was two stories high; the washing room and drying room were very nice and large. The nurses are sisters of charity. (*Med. and Surg. Rep.*)

University of Cambridge. The examinations for Medical Degrees in the present term will commence on Monday, the 20th of May. Gentlemen, candidates for the degree of M.B., intending to offer themselves for examination, are requested to signify the same to the Regius Professor of Physic on or before the 6th of May, specifying whether they intend to offer themselves for the first or second examination only, or for both examinations for that degree. The classical subjects for the ensuing examinations for the M.B. degree are—Hippocrates:—The 1st, 2nd, 3rd, and 4th sections of the Aphorisms; Aretæus:—" On the Causes and Symptoms of Acute Diseases." The first five chapters of the Second Book; Celsus:—The Second Book. Candidates will be required to satisfy the examiners in the portions selected from each of the above authors. Candidates must produce their certificates before admission to examination. Bachelors or Licentiates of Medicine, or Masters of Arts, desirous of proceeding to the degree of M.D. in the present term, are requested to communicate their intention without delay to the Regius Professor of Physic with a view to the arrangements necessary for their public exercises in the schools.

Lunacy Regulation Bill. On Monday last, the House of Lords went into committee on this Bill. The Lord Chancellor said that it was of importance that lunatics should be regularly visited. He would propose, therefore, that instead of two medical visitors there should be but one, who should devote his whole time to the discharge of his duties. When this and some other amendments were introduced, he would propose that the Bill be printed and recommitted. The Earl of Shaftesbury thought the amendment indicated by the noble and learned lord would operate most beneficially. It was necessary that the medical officer should devote his time exclusively to the discharge of the duties entrusted to him under the Bill, and he hoped the House of Commons would provide for him a liberal remuneration. The Marquis of Westmeath regretted that no protection was given to lunatics who, though not dangerous, were yet unable to take care of themselves or their properties. Their lordships were acquainted with the case of a noble lord (Lord Kingston) which had recently been before the public. He believed that noble lord had been of unsound mind for nearly twenty years; and that, had he been taken care of in time, he might now have been in the receipt of £20,000 a year, instead of being reduced to the condition of a pauper. It was only in consequence of his being seen by a policeman straying into a railway tunnel, that he was brought under the protection of the law at all. After a few words from the Lord Chancellor, the House went into committee on the Bill, when the amendments suggested by the Lord Chancellor were agreed to.

Queen's College, Birmingham. There is now a certain prospect of entire relief from the embarrassment under which this institution has been labouring. Immediately after the meeting of creditors, Mr. Sands Cox placed in the hands of his solicitor, Mr. John Suckling, the necessary funds for payment of the first instalments to the creditors and of all claims under £5 in full, and the various amounts have been received by the creditors. At a recent meeting of the Council, on the motion of the Right Hon. the Principal the Earl of Lichfield, the thanks of the Council were presented to Mr. Cox, and a similar vote was also recorded by the creditors for the generous manner in which Mr. Cox has undertaken the payment in full of the trade debts of the College. It is hoped that the patrons and friends of the College and the promoters of education generally, will not allow Mr. Sands Cox to incur any considerable loss by his disinterested and responsible interference in the matter. The experience of the last twelve months has shown that under proper supervision excess of expenditure over income may for the future be avoided. Full six hundred medical practitioners in the midland districts, and upwards of one hundred in Birmingham, have been trained at the College. The Professor of Anatomy and the Professor of Chemistry, in King's College, London; the Professor of Surgery at the University of Wisconsin, United States; the founder of the British Hospital at Canton; and the only surgeon who obtained the Victoria Cross in the Crimean war; and another surgeon who received a medal and cross, and the Order of St. Maurice, from the King of Sardinia, for professional services rendered to his troops, are numbered amongst Queen's College students. We understand a subscription list has been opened, and that Mr. Cox has been already promised a fair amount of support. His friends will no doubt rally round him, and with their assistance he will, we trust, work out the philanthropic object he has in view—one which all parties must admit is creditable alike to that gentleman and the town in which the College chartered to wear a royal name has happened to be founded.

Health of London during the last Quarter. In the thirteen weeks that ended on Saturday, March 30, the deaths registered in London were 18,965. In the corresponding quarter of the last year the number was 18,814. The high mortality that distinguished the first month of the present year, and filled the registers with 1700 and 1900 names in a week, was the result of exceedingly cold weather. When the season relaxed its rigour the deaths decreased, and in each of the last seven weeks the number was below the average, and towards the close of the quarter very considerably below it. Notwithstanding the cold of January, the mean temperature of the air in the quarter was 39·7°, which rather exceeds the average. Last quarter zymotic diseases numbered 3,674 deaths, against 3,380 in the winter quarter of 1860. A comparison of the two periods shows that while there has been a great decrease in the amount of fatal small-pox, and also a decrease in scarlatina and typhus, measles has become more prevalent, and a very great increase has occured in whooping-cough and croup. Fatal cases of rheumatism and rheumatic fever have also been more numerous. On the other hand, influenza was decidedly less fatal than in the four previous corresponding quarters. Excluding phthisis from the account, the deaths from pulmonary complaints were 4,798, which is a very heavy contingent, but is less than it was in the same quarter of last year, when the mean temperature was rather lower. Bronchitis raises the mortality, chiefly by attacking old persons; pneumonia is more confined to the young. The deaths from the former were 2,925, against 2,966 in the winter of 1860, and greatly exceeded the average; but those from the latter were 1250, against 1685 in the same period of last year, and were less than the average. The excess of mortality referred to whooping-cough, and which is mentioned above, furnishes an explanation of this result. But the cold season thinned the ranks, less of those of tender years, than of the aged and infirm. (*Registrar-General.*)

Statistics of Rome. The correspondent of the *Standard*, deriving his information from tables published in the *Lombardia*, an Italian paper, states that the present population of the city of Rome, taken from the returns of last year, consists of 184,049 persons, distributed among 37,708 families. The variations in this respect, presented by a comparison of one year with another, are very striking. In 1775, under the pontificate of Pius VI, the population was 165,047, a higher number than had been attained in any age subsequent to the Imperial epoch, when it had been estimated at 1,200,000. In 1813 it had dwindled to 117,880. From that period a gradual rise is perceptible, subject, however, to certain drawbacks, as, for instance, in 1839, when as as many as 16,000 persons fell victims to the cholera. In the revolutionary year 1848 the number of inhabitants was 179,006; and in 1849, the year of the Papal restoration it fell to 169,740. The average number of marriages every year is 1400, and the annual excess of births over deaths 600. The mean temperature in the winter is 6 degrees Réaumur (45 deg. F.), and in the summer 24 deg. R. (86 deg. F.). In the season of the greatest cold the thermometer occasionally falls to 2 and 3 degrees below zero (about 28 deg. and 25 deg. F.), and rises sometimes in summer as high as 30 deg. Much remains to be done towards the improvement of the sanitary conditions of the city of Rome, which at certain seasons of the year, as is known, are extremely unfavourable. Intermittent fevers, rheumatic disorders, gastric fever, and apoplexy, are, according to this statement, of the most frequent occurrence. The criminal statistics of the population show a notable preponderance of offences, accompanied with violence.

Cork Medical Protective Association. A large meeting of this body, with several deputations from similar societies, was held on Saturday week, in the lecture-room of the Royal Cork Institution. The object of this meeting was to adopt the report of the last proceedings of the Association, and to pass various resolutions touching those bills now before Parliament which affect the medical profession. Dr. Mackesy stated that "One object to be looked for was a distinct medical department in the poor-law system, and if this point were gained it would be better alike for the sick poor and the profession. We should then have a Medical Director-General of Civil Hospitals, in place of a Medical Commissioner as at present, having on all medical subjects only one voice in three. The full responsibility of all medical arrangements would thus be placed on a medical gentleman, whose high honour and integrity we all value and respect, and who being in command, would be enabled to organise in the most efficient manner medical relief for the sick poor, for divided responsibility never answers, and who could employ the medical inspectors in sanitary and statistical inquiries in their respective districts, in examining the state of the appliances and medicines in the dispensaries and hospitals, and in seeing that properly-constructed ambulances were provided for the conveyance of patients; and not have the time of the inspectors frittered away in holding inquiries on frivolous complaints against medical officers, which should be investigated by the dispensary committees. It may also be hoped that some arrangements may be made by which the operative classes, and the poorer classes of shopkeepers and farmers, may be accommodated, when, from disease or injury, they require hospital relief, without their feelings of independence and self-respect being destroyed by their being made the inmates of poorhouses." Resolutions to the following effect were carried:—"That the proposed Bill for the Registration of Births, Deaths, and Marriages is well calculated to secure a faithful record of statistics so much needed in Ireland."—"That the profession should be prepared with such evidence to lay before the Committee of the House of Commons as will lead to the removal of defects in the Medical Charities Act."—"That, if a Reform Bill is brought forward, a representation in the House of Commons for the medical profession should be demanded."—"That the Medical Registration Act is greatly deficient in its provisions; and that the law demands such changes as will render it protective of the interests of legally qualified medical practitioners, its provisions more stringent as to the preliminary and professional education of candidates for examination, and make that education uniform in the several schools of the United Kingdom."—"That, whilst the propriety of fair and open investigation into cases of *boná fide* complaint respecting professional neglect is freely admitted, the unjustifiable conduct of such parties as occasionally attempt to injure the characters of our professional brethren by vexatious and unfounded accusations cannot be too strongly denounced."

Royal College of Physicians of London. The following were the questions submitted to the candidates at the recent examination for the license.

First Examination. *Anatomy and Physiology.* 1. Describe the medulla oblongata of man. Mention the nerves which take their origin from it, and their presumable functions. 2. Describe the structure of the larger and smaller arteries; and explain how their structure is adapted to their functions. What is the true meaning of "arterial action"? 3. Describe the coats of the stomach; their general arrangement and minute structure. What are the characters of the gastric secretion; and what is its probable amount daily? 4. Describe the mechanism of respiration; and the changes it impresses on the air inspired. 5. Define, with reference to the surface of the body, the situation of the heart, aorta, liver, stomach, and spleen. 6. What is the function of the liver? *Chemistry, Materia Medica, and Practical Pharmacy.* 1. How would you proceed in order to determine the presence of albumen in the urine? State the sources of fallacy connected with each test. 2. Name the principal officinal caustics; explain their chemical action in each case; and give examples of the morbid conditions to which they are respectively adapted. 3. Describe the officinal iodides. State how they are prepared; and mention the impurities which they are liable to contain. 4. Describe the preparations of colchicum. What are the relative strengths of acetum colchici and vinum colchici, supposing the whole of the active principles to be taken up. 5. Enumerate the officinal substances which increase and which diminish the action of the bowels; classifying the former both according to their power and their mode of action.

Second Examination. *Principles and Practice of Medicine.* 1. What are the anatomical characters and symptoms of cirrhosis of the liver? How is its diagnosis to be made? 2. Describe the physical signs and local effects of a sacculated aneurism of the arch of the aorta. 3. Describe the general phenomena of hæmatemesis; its various causes; and give the characters which distinguish it from hæmoptysis. 4. Give the distinguishing characters of scarlet fever, diphtheria, and croup; and describe the treatment of those diseases respectively. 5. Describe the treatment of pneumonia.

6. State the various remedies recommended for the treatment of acute rheumatism and gout; and the doses of each. *Midwifery and the Diseases of Women.* 1. Describe the course of the head through the pelvis, in a case of face presentation. 2. Describe the various conditions upon which protracted labour depends, and point out the remedies suitable to each. 3. What are the different indications for the induction of premature labour? What are the different modes of inducing it, and the comparative advantages and disadvantages of each? 4. Describe the principal remedies employed in restraining uterine hæmorrhage; explain their modes of operation, and point out the particular circumstances under which each should be employed. 5. What is retroversion of the uterus? By what circumstances is it produced? and how is it treated? 6. Enumerate the different varieties of uterine polypus, and describe the seat and structure of each, with the symptoms to which they give rise.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.

FRIDAY. ...... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal College of Physicians, 8.30 P.M.: Dr. Beale, "On the Structure and Growth of Tissues."—Medical, 8.30 P.M.: Dr. Symes Thompson, "On Progressive Muscular Atrophy."—Royal Geographical.

TUESDAY. Royal Medical and Chirurgical, 8.30 P.M.: Mr. John Birkett, "On Removing Primary Growths of Cancer in the Breast"; Mr. T. Ballard, "On a Previously Unobserved Preventible Cause of Idiocy, etc.".—Zoological.—Antiquarian (Anniversary).

WEDNESDAY. Society of Arts, 8 P.M.: Mr. J. Bell, "On Coloured Statues; Colouring around Statues; and Painting and Statues."—Geological.—Royal Society of Literature.

THURSDAY. Royal.

FRIDAY. Royal Institution.

SATURDAY. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—APRIL 13TH, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week....................	Boys ..1012 Girls.. 992	2004	1209
Average of corresponding weeks 1851-60		1723	1288

Barometer:
Highest (Tu.) 30.396; lowest (Sun.) 30.123; mean 30.259.

Thermometer:
Highest in sun—extremes (Th.) 111 degrees; (Sun.) 81 degrees.
In shade—highest (Fri.) 63.5 degrees; lowest (Th.) 28.6 degrees.
Mean—44.2 degrees; difference from mean of 43 yrs.—1.0 deg.
Range—during week, 34.9 degrees; mean daily, 20.8 degrees.

Mean humidity of air (*saturation*=100), 92.

Mean direction of wind, N.E.—Rain in inches, 0.00.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ETHER *versus* CHLOROFORM.—On this subject, a correspondent writes to us as follows:—"Our medical brethren in America seem very busy at present in a thorough examination of the subject of the much debated immunity from danger which they claim for sulphuric ether as an anæsthetic as compared to chloroform. The Boston Society for 'Medical Improvement' (analogous to our Royal Society) has appointed a Committee of their chief men, including Jackson, Hodges, Hayward, Townsend, etc., to investigate the alleged deaths from inhalation of ether; and through their chief correspondent at this side of the Atlantic they request the assistance of the British Medical Association. They have sent this month circulars to all the leading medical schools in Europe, begging to be supplied with the particulars of any accident from ether, or chloroform and ether mixed; the place, time, and circumstance of the occurrence; with the mode of inhalation adopted; the period after inhalation at which death occurred, etc. The Committee in their communication refer with astonishment to the two last books which have reached America from London; in one of which (Mr. Erichsen's third edition), it is stated that no death has ever occurred in Europe from the administration of sulphuric ether; whereas, in the other (Dr. Kidd's *Manual*), so many as twenty deaths from ether are referred to as generally known in France, Germany, and Italy, to have happened. The Committee will consider it a great satisfaction to obtain the cooperation of the British Medical Association, as the question is really one of vast importance, now that over one hundred and fifty deaths have been tabulated from chloroform. A very valuable prize essay or report on the whole subject is promised, as the result of the inquiry."

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS OF IRELAND.—SIR: Permit me to join with "Medicus" in soliciting the publication of your correspondent's letter, relating to the power of the King and Queen's College of Physicians to grant the Doctorate of M.D. I had fully determined to present myself for examination; but not being in possession of the requisite data to enable me to judge of the correctness of the opposing opinions, I was deterred from so doing. The publication of the passages of the Charter and Acts of Parliament, upon which the claim of the Irish College is founded, would be the most satisfactory mode of clearing up the present doubt—far more so than the mere opinions of any Council, however eminent.

I am, etc., M.R.C.P.Edin.

[We have received a similar request from "Blatta". ED.]

TITLES.—SIR: The following bill was given me by the wife of the labourer to whom it is addressed:—

Mr. T ( ). To Dr. W ( ).
For professional attendance, August 1860........ £0 15 0
Payment of the above is *immediately* requested.

The sender is an M.B.Lond. Is he entitled to call himself doctor?

I am, etc.,
East Sussex, April 15th, 1861. I. H. R., M.B. M.A.

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THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*
Worcester, April 1861.

COMMUNICATIONS have been received from:—Mr. W. SANDS COX; Dr. JOHN ARMSTRONG; Dr. F. J. BROWN; Mr. W. COPNEY; Mr. R. C. HURST; Mr. H. LEE; Mr. P. MARTIN; Mr. J. CORNWALL; Dr. MURCHISON; Dr. HENTY; DELTA; Mr. R. P. B. TAAFFE; Mr. H. TERRY, JUN.; Mr. T. M. STONE; Dr. C. HOLMAN; I. H. R.; Dr. LOGAN; Mr. ROBERTON; Dr. MUNROE; Dr. SANDWITH; Mr. R. T. TASKER; Dr. COATES; and Dr. J. BULLAR.

Practical Observations

ON

"SUPPORTING THE PERINÆUM."

BY
GRAILY HEWITT, M.D., M.R.C.P.,
PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL; LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

[*Continued from page* 381.]

The Causes of Laceration of the Perinæum in Labour. The effects produced by "supporting the perinæum" have now been considered and discussed *seriatim;* the mechanism by which the perinæum is distended under ordinary circumstances, has also been described at some length. How far the operation falls short of effecting what it has been supposed to effect, how considerably it may interfere with the mechanism of the process of dilatation on which the safety of the perinæum depends, all this I have attempted to show.

Before coming to any conclusion as to what should be the proper management of the perinæum in labour, I propose to examine briefly the question—What are the causes of laceration of the perinæum? The mechanism of distension of the perinæum during the birth of the head having been considered, we are now in a better position for discussing this part of the subject.

I am not aware that any attempt has been made to collect together fairly and dispassionately the facts scattered over obstetric literature, on the subject of perinæal laceration during labour, in such a manner as to obtain anything like conclusive evidence as to the causes of the accident. Indeed, it is questionable whether any results of value could be obtained by any one making the attempt; and for this reason, that the judgment of the individual recording a particular observation is so likely to be warped and distorted by his own preconceived opinions on the matter. Few, comparatively speaking, go out of the beaten track; and when recognised procedures fail in procuring the end desired, it is generally the case that the failure is set down by the practitioner to his own want of skill in applying the remedy, rather than to a want of potency in the remedy itself. Hence the difficulty of arriving at the truth in such a question as the cause of laceration of the perinæum. Added to this, there is this particular difficulty, or disturbing element, that we can hardly say, from experience, what is the percentage of cases in which laceration actually occurs, or would occur, were the perinæum left to take care of itself, the practice of artificially tending it being so universally the one adopted.

The parts concerned, and the respective condition of which it is necessary particularly to investigate in reference to the question, are—

1. The uterus; and the force and frequency of its contractions.
2. The presenting part of the child.
3. The pelvis.
4. The perinæum itself.

The answer to the question, What are the causes of laceration? is, that a faulty condition, absolutely or relatively, of any one of these, or of two or more associated, is sufficient to produce laceration.

It is impossible to dissociate all these elements in arriving at a real conclusion as to the cause of the laceration in a particular case, as will be at once admitted on looking the facts fairly in the face. Thus, when we are told that "great size of the child's head" was the cause in a particular instance, this may convey but a very small part of the truth. We must be told what was the force and frequency of the pains—what, also, was the condition of the perinæum—before we are able to say that the size of the head was the *real* cause. It is well known that heads of remarkable size do pass through the ostium vaginæ without inflicting the smallest injury on the soft parts; the mere fact that the head was large may have had very little to do with the laceration.

It is to be remarked, that the recorders of particular cases of laceration have generally failed to supply us with such full information as would enable us to say whether the cause of laceration, as stated by them, be really the cause or not. The conclusion arrived at by particular observers is, in too many cases, open to this serious objection.

Premising that these sources of fallacy will have to be encountered in any statistical inquiry, let us examine for a moment some of the documentary evidence obtainable, as to the cause of laceration of the perinæum. Take, for instance, the eighty-one cases, most of them of severe laceration, recorded as operated on by Mr. Baker Brown. The information which I have been able to extract from the reports of these eighty-one cases, and bearing on the present inquiry, is as follows:—

The laceration occurred during a first labour in forty-nine cases, and the labour was terminated by instrumental aid in nineteen of these cases.

The laceration occurred in seventeen cases in which the labour was not the first, and in four of these it is stated that recourse was had to instrumental aid.

There are fourteen other cases in which it is not stated whether the accident occurred during a first or during a subsequent labour. In eight of these instruments were used; in six not. Thus, instruments were used in thirty-one cases, and not used in forty-nine.

The proportion of cases in primiparæ to those in multiparæ was about as three to one.

The great preponderance of cases of primiparæ is very striking, and shews us convincingly that laceration is far more likely to occur in first than in subsequent labours.

With reference to this part of the question, it may be here incidentally mentioned that Dr. Snow Beck gives the result of some observations, from which it would appear that laceration to a considerable extent may and does take place in primiparæ very much more frequently than is generally supposed. Thus, in 112 primiparal labours, the perinæum was lacerated "through the whole extent" in seventy-five cases. (*Med. Times and Gazette*, Feb. 23, 1856.) Dr. Beck believes that lacerations to this extent do occur much more frequently than is supposed, but that they are overlooked, and occasion, in most cases, little inconvenience. Before this opinion can be received as universally applicable, a large number of observations made for the special purpose of determining this point will be necessary. So far, Dr. Beck's observations confirm the general opinion as to the greater frequency of laceration in primiparæ.

To return to Mr. Brown's statistics. The cases in which instruments are stated to have been used, can hardly be analysed with any useful result; for it is very difficult to say whether the laceration and the use of instruments were necessarily and unavoidably, or only accidentally, connected.

The causes of laceration in the thirty cases of primiparæ in which no instruments were used chiefly interest us here. Now, in four of these cases, the laceration was evidently, as it appears to me, connected with great rapidity of labour. In one of these cases, Mr. Brown reports the cause to have been rapid labour; but in the other three, although the labour is stated to have been rapid, the cause is considered to have been the absence of medical assistance. The mere fact that laceration occurred in these cases before medical assistance could be obtained, in itself shews that the labours must have been more rapid than usual. There is, therefore, as much reason—as I believe infinitely more—for supposing the cause to have been rapid labour, as want of assistance. As regards the remainder of the thirty cases, the details given are insufficient for the purpose of arriving at any general conclusion.

Mr. Brown draws the conclusion which his statistics so far bear out, that old primiparæ are more liable to the accident than younger individuals.

Such are the chief deductions obtainable from the cases in question; and it is hardly likely that any better or more conclusive information could be obtained from any statistical data at present available.

Logically, the conclusions we are justified in forming from the facts just quoted are:—

That in a primipara labour is more likely to be attended with laceration; but especially is this the case if the labour happen to be a rapid one.

That, in the hands of many individuals, the use of the forceps is dangerous to the integrity of the perinæal structures. It would be unfair, from the mere fact that laceration occurred when the forceps were used, as I would again remark, to conclude that the use of the forceps and the laceration were necessarily connected. The forceps may be used so as to imperil the perinæal structures in the very highest degree; but we must be very careful of drawing a conclusion inimical to the use of the instrument in question, simply because, in many cases, laceration of the perinæum has appeared to have been caused by its use. This is not the place to enlarge on the proper method of using this invaluable instrument; but I may remark that it is very easy to understand how laceration of the perinæum might be caused by the forceps, in the hands of an inexperienced or ignorant operator, and how difficult it must be for one who has not thoroughly studied the mechanism of parturition to be properly imbued with the necessity for exercising his traction in the direction of a curve, the segment of a circle, of which the pubic arch is the centre. It is highly probable that it is not the use, but the misuse, of instruments to which the perinæum is indebted for being torn.

These cases of Mr. Brown's were most of them cases of severe laceration.

Statistics failing to give the desired information, let us inquire, in the first place, what are the deductions obtainable from reasoning.

Force of uterine contractions in relation to laceration. All reasoning is in favour of the supposition that the laceration which occurs is, in a large proportion of cases, mainly attributable to unduly forcible uterine contractions. The results of observation are that, if only a sufficient time be allowed, the perinæal structures will undergo almost any amount of distension, both in cases where the difficulty is caused by the tightness, resistance, or so-called "rigidity" of the perinæum itself, and in those cases where the difficulty is created by undue size of the presenting part of the child.

If the uterine efforts be sufficiently strong to overcome the resistance, the ostium vaginæ must increase in size, and the perinæum must dilate sufficiently to allow the head to pass, or laceration is the necessary alternative. The resistance of the perinæum, and the force of the uterine contractions, are the two opposing forces, and, as a rule, they are so proportioned one to the other, that parturition is effected without injury, certainly without serious injury, to the soft parts. But, if the uterus act with unusual force and rapidity, the head may descend, and, before the perinæum has been at all dilated, or has had time to dilate, the head is thrust through, and laceration occurs. For this effect to result, it would seem reasonable to conclude that the pelvis must be capacious, the head moderately large, the perinæum firm, or as it is termed, "rigid." It seems quite necessary to admit that mere rapidity of labour, the head in such cases presenting normally, and coming into contact with the perinæum in the most advantageous manner, may give rise to laceration.

Some of the older authors, Denman for instance, conceived that the laceration was due in many cases to violent voluntary efforts on the part of the patient during the expulsive stage, the theory of Denman being that the perinæum was able to resist the effects of the "instinctive" force produced by the uterine contractions; but that when the woman added to these violent contractions of the voluntary muscles, the effect of the two together was more than the perinæum could withstand. Dr. Leishman appears to have adopted this view to a certain extent.

This is only another way of saying that the laceration is liable to occur when the labour is too rapid; the fact being that the perinæum is unable to resist the force in question, because it is applied so continuously and persistently as to allow no time for the necessary dilatation.

What is the share which abnormal or unusual conditions of the presenting part of the Fœtus play in the production of perinæal laceration? A knowledge of the mechanism of the expulsion of the head will assist us in answering this question. Thus, it being the fact that, normally, distension of the perinæum is accomplished gradually, and that each part of the perinæum is equally stretched and dilated, it is clear that if the presenting part be *irregular in shape*, or less capable, in fact, than usual of assuming that conical shape so admirably adapted for dilating the vaginal outlet, the perinæal structures cannot be equably dilated, and the uterine contractions may expel the fœtus before the structures in question have really undergone proper dilatation. Such a condition of things is met with when the head is very firmly ossified, or when the presentation is in any way abnormal. The reason that an angular or irregular presentation is not more often attended with laceration probably is that the labour being in such cases more tedious than usual, the perinæum has more time given to it wherein to become dilated.

Further, the association of the two conditions, mal-presentation and unusually forcible or quick contractions of the uterus, must be favourable to the occurrence of perinæal laceration in the very highest degree.

Breech presentations must be regarded as unfavourable to the integrity of the perinæal structures, especially when the delivery is quick, owing either to rapidity of uterine contractions, or what amounts to the same thing, rapid artificial extraction of the child, after turning or otherwise. In Dr. Figg's practice, we have illustrations of the possible injurious tendency of the combination—breech presentation and rapid extraction—to produce laceration. Dr. Figg states (*Med. Times and Gaz.*, Oct. 13, 1860, p. 354) that "in version the exit of the head is too rapid for the production of such injury to any extent"; but in the very same paper he informs us of a fact which is not quite in unison with this opinion—namely, that in two cases very severe laceration of the perinæum occurred in primiparæ in delivery after version.

In the reports of the cases operated on by Mr. Baker Brown, we find some particulars also as to the influence of this mode of delivery in the production of laceration. There are in the whole five instances (three of these primiparæ) in which laceration occurred in cases of pelvic or footling presentation: in two of these, turning had been performed. Numerically, these five cases bear a certain important proportion to the whole number recorded by Mr. Brown.

Conditions of the pelvis leading to laceration. Normally the head is so moved and turned in its course through the pelvis, that it is presented to the perinæal outlet in the manner the most favourable to dilatation of the soft parts; but if there be deformity of the pelvis, or if there be such a want of proportion between the head and the pelvic bones as to interfere with this, the perinæum is not equably dilated, and it may be that without previous warning, so to speak, the perinæum has to deal with one of the long diameters of the head. This state of things may occur from undue ossification of the head, from mere size of the same, from very slight contraction of the pelvis, from exostosis, possibly from an unusually straight condition of the sacrum, etc. Again, the combination of one of these conditions with rapidity of uterine contraction would be more likely to give rise to laceration than when alone: the laceration may be at the last actually due to a very trifling, almost intangible, but additional abnormal element.

The condition of the perinæum itself remains to be considered.

[*To be continued.*]

Medical Rank in the American Navy. General orders have recently been issued to the following effect:—Surgeons of the fleet, and surgeons of more than twelve years, rank with commanders. Surgeons of less than twelve years rank with lieutenants. Passed assistant-surgeons rank next after lieutenants. Assistant-surgeons rank next after masters. Commanders and executive officers, of whatever grade, while on duty, take precedence of surgeons. (*Med. and Surg. Reporter.*)

Illustrations of HOSPITAL PRACTICE: METROPOLITAN AND PROVINCIAL.

LIVERPOOL NORTHERN HOSPITAL.

CASES OF ACUTE DISEASE OF THE CHEST.

Under the care of A. T. H. Waters, M.R.C.P., Physician to the Hospital.

[Reported by F. P. Phelps, Esq., B.A.Oxon., Junior House-Surgeon.]

[*Continued from page 248.*]

Case x. *Pneumothorax followed by Effusion: Pericarditis.* Wm. Sutherland, aged 24, seaman, was admitted into the Hospital on September 11th, 1860. He had been ill for six months with cough, expectoration, and night-sweats, but had kept at his work up to three days before admission, when he was suddenly seized with a severe darting pain in the left side. The pain had continued from its first accession, but was gradually becoming less acute. When admitted, he complained of pain in, and inability to lie on, the left side. The skin was cool; the tongue foul; the pulse quick; and respiration hurried. There was deficient movement of the left side of the chest, with tympanitic resonance of the upper part. Below the level of the inferior angle of the scapula there were dulness on percussion and distinct ægophony. No respiratory sounds could be heard over the left lung, except at the apex, where there was crepitation. Vocal fremitus was absent over the left side. Succussion elicited a distinct splashing sound at the back of the chest. The heart-sounds were inaudible at the usual position of the apex, but were faintly heard at the right of the sternum. No impulse could be felt. The right lung was resonant; the respiratory sounds were healthy. He was ordered a blister to the side, port wine, beef-tea, and a cough mixture.

On the 14th, the pulse was 116; respirations 32. He had expectorated a good deal of ropy purulent matter. The physical signs were the same.

On the 17th, the pulse was 100; respirations 26. The heart was felt beating in the fourth right intercostal space. The dulness on the left side was slightly less. He was ordered a grain of calomel and one of opium twice a day, and a blister to the side.

On the 19th, he had a slight feverish attack; and a crop of miliary vesicles appeared on the chest. The wine was omitted, and a saline ordered.

On the 24th, he had quite recovered from the feverish attack; there was apparently less fluid in the chest, and the breathing was better. Pulse 104; respirations 24. He was ordered a grain of quinine three times a day, and tincture of iodine was applied to the chest.

On the 27th, the respiratory sound could be faintly heard at the upper part of the lung, both in front and behind. An amphoric breath-sound could be heard behind on deep inspiration. The extent of dulness was diminished. The impulse of the heart was scarcely perceptible in the fourth right intercostal space. He was ordered chop diet, four ounces of wine, and iodine to be applied to the chest again.

On October 1st, he had a slight return of feverish symptoms, which were relieved by a saline.

On October 11th, the physical signs were as follows. Scarcely any movement of the left side of the chest; exaggerated movement on the right side; the heart was seen beating in the third right intercostal space; amphoric breathing heard distinctly at the back of the left lung. His general appearance was improved. He had less pain; and the sputum was diminished in quantity.

He was taking his food and wine. A bitter infusion, with hydrochloric acid and chloric ether, was ordered.

On October 23rd, the general symptoms were the same; there was, however, a double friction-sound heard over the situation of the displaced heart, to the right of the sternum. He complained of no pain. Succussion elicited a splashing sound, heard outside the body; and when the ear was placed in contact with the chest, metallic tinkling was heard, synchronous with every beat of the heart.

On the 26th, he expressed a wish to be discharged, saying that he felt well; and, although warned of his danger, he left the hospital.

Case xi. *Pneumothorax followed by Effusion: Pericarditis: Paracentesis Thoracis: Death: Autopsy.* Wm. Gladwin, aged 19, sailor, was admitted into the Hospital Oct. 24th, 1860. On the 22nd, two days before admission, he was working on board-ship, when he suddently felt a sharp pain in the side and shoulder, and great difficulty of breathing. He at once took to his bed. He said he was quite well before the attack, and never had any cough. No treatment had been adopted. On admission, he complained of pain in the abdomen and chest, increased on inspiration and on pressure; the pulse was 120; respirations 56. There was tympanitic resonance over the whole of the left side of the chest, including the præcordial region; except at the extreme base, which was dull on percussion. No respiratory murmur could be heard, but there were distinct metallic tinkling, and loud amphoric breathing at the back of the chest. The respiration was superior thoracic, with but little movement of the left side. Vocal fremitus was absent on that side, and succussion elicited a splashing sound. There was slight dulness with loud breathing at the upper part of the right lung. The impulse of the heart could be felt beneath the right nipple; its sounds were normal. He was ordered a saline with ammonia, a pill of calomel and opium at bedtime, and beef-tea.

On the 30th, the pulse was 112; respirations 36. He complained of no pain. The physical signs were about the same, except that there was increased extent of dulness at the base of the left side of the chest. He had a troublesome cough, attended with frothy expectoration. He was ordered an opiate every night, with a blister to the side, and six ounces of wine.

On the 3rd November, his general symptoms were much relieved; he slept well, and complained of no pain. The pulse was 116; respirations 36. He was taking a chop daily with wine, and a cough mixture.

He continued in much the same way during the month of November. There was but little increase of fluid in the chest. Metallic tinkling could be often heard, and at times it was found to be synchronous with the heart's beat. A respiratory murmur could be faintly heard at the upper part of the left side, both in front and behind. This sound, which continued up to the time of death, must have been, as will be seen from the *post mortem* appearances, transmitted from the right side.

From December 1st, he visibly declined; the upper part of the chest became more prominent, and the dulness at the base gradually increased in extent; his appetite began to fail, and he lost flesh; the pain in the side returned, with dyspnœa and increased cough. He had an occasional blister applied, and he continued his wine and opium.

On the 18th, the pulse was 128; respirations 56; the left side much distended, the intercostal spaces prominent. There was pain on pressure over the whole of the left side, with dulness up to the level of the lower angle of the scapula. A double friction-sound was heard over the situation of the displaced heart, viz., to the right of the sternum, but there was no pain. A blister was ordered to be applied over the heart; he was to take eight ounces of wine daily, with as much nourishment as possible.

On the 22nd, the pericardial friction sound was still heard, but over a less extent of surface; there was no increased dulness over the heart; the dyspnœa and cough were increasing.

On the 25th, he was tapped by Mr. Manifold; and about three pints of purulent fluid were removed from the left pleural cavity, with great relief to the breathing. The relief was, however, only temporary, and the chest soon filled again.

On January 6th, the dulness extended to the level of the left nipple. No friction sound could be heard over the situation of the heart, and its action was regular and free from murmur.

On the 13th, he was again tapped, when about a quart of fluid was removed.

He died on the 19th, much emaciated, and having had œdema of the lower limbs for the previous four weeks.

Autopsy. The left pleural cavity contained a large quantity of air, and about a quart of thick purulent fluid. The left lung was collapsed, and lying at the back of the chest. The two lobes were each of about the size of a small orange. The surface of the lung and the inner surface of the thoracic walls were covered with a layer, about a quarter of an inch thick, of soft yellow fibrinous deposit; the reflected pleura of this side was much thickened. The substance of the left lung was firm, and of a dark grey colour; intensely "carnified". No tubercles could be found in it. Extensive pleural adhesions existed on the right side. The right lung was somewhat firm, and throughout slightly "carnified". It did not present any appearance of inflammation. There were a few tubercles in the upper lobe. The heart was altogether to the right of the median line, and the pericardium was extensively adherent. The substance of the heart itself was somewhat soft, but the valves were quite healthy.

[*To be continued.*]

Good Company and Digestion. All those manifold efforts and stratagems by which food is first secured, then prepared by the elaborate ingenuity of cooks, then digested by the elaborate machinery of the digestive apparatus, and then conveyed to various organs by the wondrous machinery of the circulation, are set going to bring a little liquid into contact with the delicate membrane of a cell, visible only under the magnifying powers of the microscope. Every organ of the body is composed of millions upon millions of these cells, every one of which lives its separate life, and must be separately fed. To feed it, thousands of men dig and plough, sow and reap, hunt and fish, rear cattle and slaughter them; thousands act as mere agents and carriers of the food; thousands as cooks; and each has to satisfy the clamorous demands of his own hungry cells. The simpler plants floating in water, or the simple parasites living in the liquids of other animals, feed without this bother and this preparation. The higher organisms have to devote their energies to secure and to prepare their food, because their simple cells cannot secure it, and must have it. In man, self-indulgence and indolence often weaken the digestive machinery, which has therefore to be stimulated into activity by condiments, by flavours, and by mental exhilaration; his meal becomes a banquet. The stimulus of festal excitement, the laugh and conversation of a joyous dinner, spur the lazy organs of digestion, and enable men to master food which, if eaten in solitude, silence, or sorrow, would lie a heavy lump on the stomach. Eating seems a simple process, until long experience has taught us its complexity. Food seems a very simple thing, till science reveals its metamorphoses. (*All the Year Round.*)

Original Communications.

THE GALVANO-CAUSTIC APPARATUS: ITS APPLICATIONS IN SURGERY.

By Thomas James Walker, M.B.Lond., late Assistant-Physician and Pathologist to the Queen's Hospital, and Demonstrator of Anatomy in Queen's College, Birmingham.

[*Concluded from page* 411.]

As the cases I have mentioned give no idea of the variety of circumstances in which the galvano-caustic apparatus may be employed, and as only a few cases of fistula, nævus, hæmorrhoids, etc., have been recorded by British surgeons, and by our dentists only cases of the application of the instrument to the teeth, I shall now mention a few of the cases recorded in Dr. Zsigmondy's treatise.*

He alludes to some of Professor Middeldorpf's cases, of which perhaps the most interesting is one where a *polypoid* tumour weighing over two drachms, growing in the larynx above the right vocal cord, and interfering seriously with respiration and deglutition, was removed by the cutting noose. Three times the endeavours to place the noose round the tumour failed, owing to the violent choking and spasm which the attempts caused, and the consequent depression of the larynx. The tongue, however, being seized by a pair of forceps, was drawn forwards, and the larynx thus fixed; and now, notwithstanding the choking, the end of the cannula was rapidly brought behind the epiglottis; the wire-noose was thrown over the tumour, and by means of the finger pressed down to its base; the loop was tightened; the battery set in action; and one or two turns of the screw caused the tumour to fall off. There was no bleeding, no more distress in breathing or swallowing. In four days the patient was able to leave his bed, and in twenty-eight days he quitted the hospital. It is difficult to conceive how this tumour could have been extirpated by any other instrument; and, had it not been removed, probably not even tracheotomy would have saved the life of the patient. Another of Middeldorpf's cases is interesting, as showing the powers of the instrument. He removed a supernumerary thumb from the finger of a child six months old, and with the platinum wire cut the bone smoothly through.

Zsigmondy records, among other cases occurring in his own practice, three of *amputation of the penis*—an operation to which the galvano-caustic apparatus is considered especially applicable. In one case, cicatrisation of the wound required seven weeks for completion, and the patient died from a return of the disease. In a second, the operation was adopted merely as a palliative. In the third, the patient died thirteen days after the operation, from pyæmia.

Several cases of removal of *hæmorrhoids* are given, one of extirpation of the lower vascular and polypoid portion of intestine in a case of *prolapsus ani*, and another case of prolapsus in a child four years of age, in which, the portion of intestine liable to prolapse being pulled down by the finger and fixed externally by hooked forceps, four deep longitudinal grooves were made with the *Galvanokauter;* the parts suppurated, and the contraction was such that in five weeks the prolapsus was completely healed. Cases of *extirpation* of several *tumours* are related; also two cases of *castration* for scrofulous disease of the testicle, in one of which the whole operation was completed by the cutting noose; in the other, the skin and cellular tissue, being anæsthetised by a freezing mixture, were divided by a knife, the spermatic cord, etc., being divided by the cutting noose. *Amputation of the breast*, for an ulcerated medullary tumour, was performed partly with the *Galvanokauter*, but chiefly by the platinum wire, which, by means of a needle, was passed through the tumour so that the noose should include the upper segment; and, this being divided, the integumental coverings of the lower portion were divided by the *Galvanokauter;* the cutting noose was then applied, to complete the removal. This operation was undertaken not so much with the object of curing the disease, as to palliate and allow the treatment by Landolfi's paste and other caustics.

The division and cauterisation of urinary, fæcal, and other *fistulas*, are recorded; and, finally, the following case of *amputation of the lower extremity* at the junction of the middle and the lower third of the thigh.

A lad, aged 16, was admitted into the General Hospital, Vienna, on the 15th of February, 1858, with acute periostitis of the right tibia. He went on well for a few days; but the knee-joint having become seriously involved, the practice of free incision into the joint was adopted, and, three days afterwards, the condition of the patient was as follows. The tongue was moister, and the general icteric tint less than before the incisions into the joint were practised. There was no cough, but hectic fever still remained; the pulse being about 114 in the minute, and rigors occurring once or twice a day. There was extreme emaciation, and a bedsore over the sacrum. The leg was bent outwards at the knee, at an angle of about 160°; while the toes were turned strongly inwards. The knee-joint was slightly swollen, sensitive to the least touch; any attempt at raising or moving the limb causing intense pain. The bones of the joint might be moved from side to side, causing crepitation. The extremity was somewhat less swollen than it had previously been; its cutaneous covering was puckered; the four incisions made by the surgeon were indolent, without granulations, smooth and pale. The secretion was not so copious, offensive, or frothy, as earlier. The inguinal glands were not enlarged. There appeared to be a chance for the patient, if the limb could be removed; and, Professor Zsigmondy thinking that this could safely be done by the galvano-caustic apparatus, on the 18th of March the patient was put under the influence of chloroform, and the operation performed as follows. The wire of the cutting noose was passed round the thigh, which was so emaciated that the platinum wire required was only ten inches long; this, however, being still much more than is needed in most operations, could not be heated without the full power of the battery, and could not be used more than the fiftieth of an inch thick. By turning the screw of the instrument, the wire was tightened until the obstruction to the venous circulation was so great as to cause a few drops of blood to ooze from the sinuses in the leg; and now, the combining disk being placed on the battery, the screw was slowly turned, and the tightening wire burned its way through the skin. The battery, strong as it was, was not sufficient to cause the whole length of the wire to glow; and the middle of the noose, which was unexpectedly the coolest part, made slow progress compared with the part of the wire nearer the ends. Before the skin was completely cut through, the wire broke, and had to be renewed; it was again applied in the same situation, and the operation continued. After the division of the superficial muscles, these with the skin were retracted as much as they could be; and the division of the deeper tissues was effected in a higher place than that in which the instrument had worked through the superficial structures. The noose, being now much smaller, was seen at the bottom of the wound, in a glowing heat through its whole length; it was pushed up along the bone, so as to separate the soft tissues from it, and to admit of the division of the bone higher than any of the soft tissues. The cutting noose was now removed, and a retractor applied. Up to this period there had not been a drop of blood shed in the operation; but, on the bone being sawn through, some bleeding took place from the medullary canal; and, on removing the retractor, the femoral artery sprang; it was, however, seized and tied with an ordinary ligature immediately. It was the intention of Dr. Zsigmondy to have applied a ligature to this artery, even had it not bled, as it was clearly visible at the surface of the wound, which was covered by a very thin eschar. The superficial structures were divided sufficiently low down; and the granulations in the upper part of an abscess which had been left in the stump, being loose and coarse, were removed by means of Cooper's scissors. The bleeding thus caused, as well as that from the medullary canal, was arrested by the *Galvanokauter.* The operation being completed, the only dressing applied was a large sponge bound on with a three-cornered cloth.

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* Die Galvanokaustische Operationsmethode nach eigenen Erfahrungen, etc., von Dr. A. Zsigmondy. Wien, 1860.

Immediately after the operation, extreme faintness came on; the countenance was still paler than before; the pulse was very feeble and small, 166 in the minute. Red wine was administered, with the effect of somewhat reviving the patient, who slept more quietly, and was less delirious.

Next morning. Tongue dry; pulse 132. Complexion paler than before the operation, and slightly yellowish. Patient cheerful, and pleased at the relief from pain. At the stump, the skin was somewhat retracted; it was not burned more than was requisite, being hard round the edge to the extent of about a line. In several points at the stump, the epidermis was raised into little blisters.

Second day (March 20th). Good appetite.

Third day. Spots of purpura had appeared on the breast, belly, and extremities; the wound was livid and inactive. In the evening, the patient had a rigor.

Fourth day. Two rigors, followed by heat, sweating, thirst, and frequent delirium; no cough; advancing emaciation. The complexion was still yellow; bedsore sloughing; superficial gangrene of the stump, from which the bone projected, the soft parts being retracted.

Fifth day. Diarrhœa, involuntary stools, etc. Death.

A *post mortem* examination disclosed, in addition to the appearances of extreme anæmia, only metastatic abscesses in both lungs, varying from the size of a bean to that of a walnut. The soft parts at the stump had retracted, so that the wound appeared as a hemisphere, with the bone projecting from its centre. The wound was black, dry, and without any sign of reaction.

Having described the instruments used in galvano-caustic operations and given illustrations of the cases in which they may be employed, I will add a few considerations on the advantages and disadvantages of the apparatus as compared with others for which it may be substituted: viz., caustics, cutting instruments, ligatures, and crushing instruments.

In comparing the galvanic cautery with other *escharotics*, we must take into consideration the degree to which it acts on the tissues, the pain it causes, the nature of the wound produced, and the convenience of application. We cannot substitute the galvanic cautery for any of the milder caustics, which act rather as astringents. From more powerful caustics, such as chloride of zinc, Vienna paste, etc., the galvanic cautery differs in the fact that its working is limited to the part to which it is actually applied, and that it works therefore to but a limited depth. This property may be an advantage or disadvantage according to circumstances; in many cases complete but superficial destruction of tissues is all that we desire, and this could be effected with much more certainty by the instruments now under consideration than by any potential caustic; while on the other hand their application would be decidedly contraindicated where we wished to effect any considerable destruction of tissue as in the treatment of cancer, etc. The galvanic cautery must be preferred to the actual cautery heated as usual, under all circumstances, when the size of the part to which it is to be applied is not great; but in this case the slowness of the galvanic operation, from the necessarily small size of the cautery, must render the ordinary heated iron the more suitable instrument, notwithstanding its liability to be cooled. As to the amount of pain caused by the galvanic cautery, I believe that, during the application of the instrument, this is probably as great as or greater than that produced by any other caustic; but in almost all cases it ceases on the withdrawal of the instrument. The reason why it should produce less pain than the ordinary actual cautery, I have already discussed. With regard to the wound left by this form of cautery I would merely observe, that from the cases mentioned above, where pyæmia followed the use of the instrument, it is clear that it possesses no peculiar virtue which would prevent such a result: the eschar separates usually within a week from the application, though sometimes it adheres even longer; as to the extent to which contraction takes place after the separation of the eschar I had no opportunity of judging. As to convenience of application, the galvanic cautery undoubtedly possesses an advantage over all other escharotics, and more especially over the actual cautery, in that it may be brought into contact with the part in a perfectly inert condition, a property of great importance where the part affected is situated at the bottom of any of the natural cavities or canals. In a recent number of our Journal we have an eminent surgeon advocating the treatment of stricture of the urethra by caustic; this plan has been practised in Germany, more than it has in recent years in our own country, and a galvanic cautery for the urethra is manufactured, which, being introduced as far as the stricture in an inert condition, is then brought into action by a pressure of the thumb on the slide on the handle of the instrument. Of course there are many instruments contrived to enable us to introduce potential cauteries harmlessly to the point at which we wish to apply them, but none of these can be so perfect and simple as the galvanic cautery.*

Comparing the galvano-caustic apparatus with the *écraseur*, I see no advantage which the former possesses in any but exceptional cases. The special advantage which both these methods of operating possess, is their hæmostatic action; and there is no case mentioned by Zsigmondy where the action of the cutting noose was more decided in this respect, than is that of the *écraseur*, the cases where the former instrument was employed being precisely similar to those where the latter is applicable. As regards the nature of the wound left after the operation, the *écraseur* must be acknowledged to have the advantage; the application of this instrument is almost always followed by a rapidly healing sore, while the cutting noose must always leave a burn, with a thin eschar, requiring considerable time to heal. A statement has recently appeared in the French medical journals, that many of those patients, on whom Chassaignac has operated by means of the *écraseur* for removal of the protruding bowel in prolapsus of the rectum, are now returning to the hospitals with stricture; if this be true, one cannot but suspect that such an evil consequence would be even more likely to follow the same operation by the cauterising ligature. As regards the pain caused by the two modes of operating I can only form a surmise, as in almost all cases where I have used or seen used the *écraseur*, chloroform has been administered. I should conjecture that the pain of the two operations would be about equal. The *écraseur* may be made sufficiently strong to make its way through any of the tissues through which the galvano-caustic wire has been carried, in the operations above mentioned; and amputations have been performed by the latter as by the former instrument. It is in convenience of application that the galvano-caustic cutting noose must occasionally possess a great advantage over the *écraseur;* for example, in the case of polypoid tumour in the larynx, the *écraseur* could not have been applied. In cases where very vascular tissues have to be divided, as in a case of hypertrophied clitoris mentioned by Zsigmondy, in the peduncle of which several large arteries could be readily felt pulsating, the operation might be carried out somewhat more rapidly with the cutting noose, than with the *écraseur;* but even with the former, the division must be carried on slowly, and the comparison which Zsigmondy makes, when he speaks of galvano-caustic operations as being accomplished in a few minutes, while an operation with the *écraseur* lasts an hour or more, is an excessive exaggeration.

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* A very perfect instrument of this kind for applying caustics to the larynx has been manufactured by Leiter of Vienna; this I shall describe fully in a Treatise on the Laryngoscope, on which I am engaged.

Over the *ligature* the apparatus under consideration possesses those advantages, which have frequently been urged in favour of the *écraseur;* the most prominent being that the part to be removed, as for example, a mass of hæmorrhoids, a uterine polypus, etc., is removed at once, and not left a putrescent appendage to the body until separated by ulceration, or a sensitive and inflamed part with an ulcerated neck, requiring tightening of the ligature before it is completely separated from the body, as is the case where the ligature is imperfectly applied, so as not completely to strangulate the included tissues.

To any *cutting instrument* the galvano-caustic apparatus must be decidedly preferred, in cases where the paramount indication is the employment of an operation which avoids loss of blood; but in selecting our cases we must always bear in mind, that if, on the one hand, we are saving our patient from the exhaustion caused by hæmorrhage, we are, on the other, losing the chance of primary union which might result should cutting instruments be employed, and are insuring a suppurative process which may damage the system no less than would loss of blood. This reminder I make in allusion to such a case as that of amputation at the thigh described in another part of this paper; and I would suggest that, if the employment of acupressure needles, as advocated by Dr. Simpson, improve our chance of obtaining primary union as much as I am inclined to think it will, this consideration gains considerable weight.

As I have employed one case of tumour in the larynx to illustrate the advantages of the galvano-caustic mode of operating, I must mention another, which I shall more fully describe in my work on the laryngoscope, in the treatment of which cutting instruments are to be preferred. The case, which I frequently had opportunities of observing, was under the charge of Dr. Carl Stoerk, of the Vienna General Hospital. A child, about six years of age, laboured under aphonia, disordered respiration, etc., which were found, by laryngoscopic examination, to depend on a small apparently fibrous polypoid tumour, growing from the angle of the rima glottidis and projecting between the vocal cords. The application of lunar caustic doing nothing towards the alleviation of the symptoms, and the tumour continuing to grow, further measures were discussed, and naturally removal by the cutting noose suggested itself to us; but the operation for removal, we thought, must be a momentary one, one which would completely remove the growth, and one which would hold it secure, and prevent its passing into the trachea when removed. The galvanic cutting noose would fulfil none of these conditions; and at the time when I left Vienna, the instrument-maker was preparing a pair of curved scissors with, on the convex surface of each blade, little hooks directed inwards, which would hold anything divided by the blades. Of the issue of the case I have not yet heard.

It may occasionally happen that the galvano-caustic method should be preferred to the knife in cases of fistula, either on account of the great vascularity of the tissues to be divided, and the chance of dividing vessels awkwardly situated for the ligature, or from the obstinate tendency of the divided parts to heal so as again to leave fistula, when the action of the cautery on the divided surfaces would probably lead to healing from the bottom. It was in the treatment of fistula, I believe, that the principle of employing galvanic heat was first applied by Mr. Marshall; and the success attending this plan of treatment certainly appears as great as that following any other of the decided measures which are employed in the treatment of this affection. In all ordinary operations, however, I think the rapidity and ease with which cutting instruments may be used, must render the use of the galvano-caustic apparatus a surgical error. The opening of abscesses, and similar operations by this apparatus, as practised by Zsigmondy, etc., only illustrates the tendency that exists in surgery as in other branches of medicine, to work every novelty to excess.

Let me, before drawing my final conclusions, point out certain disadvantages which the mode of operation under review intrinsically possesses, and which must not be overlooked in comparing it with any of the other methods alluded to. In the first place, the galvano-caustic apparatus, including the most useful instruments, and properly fitted for a surgeon's use, cannot be obtained, even in Vienna, at a much lower cost than ten pounds; and the price of a well finished set is twenty pounds. Zsigmondy, taking the average of thirty times of using the apparatus, each time for about two hours and a half, considers the expense of every time the battery is used at about three shillings; and even this is a consideration where in hospital practice one would substitute the use of the galvanic-cautery for that of the ordinary one, or some equally inexpensive operation. A greater disadvantage is the liability of the apparatus to get out of working order; this I saw in the cases where Dr. Zsigmondy operated: a globule of mercury is very apt to be spilt, and to form a direct channel of communication between the elements of the battery, which completely prevents the passage of the current by the circuitous course of the conducting wires, and the platinum instrument in use. Many other causes also contribute to render the action of the battery somewhat uncertain.

Again, the constant emptying and filling of the cells with the strongest nitric and with sulphuric acid, the amalgamating of the zinc elements, etc., involves an amount of labour and a risk of destruction to property, which must, in common with the bulk and weight of the apparatus, interfere materially with its employment in private houses. Indeed, it was not unusual in Vienna to have the instrument-maker in the ward during the operations to look after the battery. Lastly, the operator is too dependent on others, on the assistant who is attending to the mutation-disks, etc. His instruments must always be connected with the battery by heavy conducting wires, which, even when of considerable length and as light as possible, cannot fail to interfere with the freedom of motion which the hands and instrument of the operator should possess. I must add, that the smell and smoke caused by the burning, and occasionally blazing tissues, must be considered an evil; great as is the horror which patients feel towards the knife, it would, I imagine, be exceeded by that produced by an operation with such accompaniments as these.

Having now endeavoured, as fairly as possible, to lay before the profession facts and considerations, from which they may form an opinion on the galvano-caustic mode of operating, I will finally state my own conviction, that it is only in exceptional cases that the galvano-caustic apparatus should be substituted for either caustics (were it not for the cumbersomeness of the apparatus, it should always supersede the common actual cautery), the *écraseur*, or cutting instruments. Hence, I would not advise every practising surgeon to possess himself of the instruments; but, since these exceptional cases not unfrequently occur, I would have each surgeon aware of this mode of operating; and in each large district there should be an operator possessed of the apparatus, to whom application could be made, in a case where this plan of operating was indicated.

Before the introduction of the *écraseur*, the galvano-caustic mode of operating was more required than now; and it is probable that our having heard so little of it recently in England, may depend on the employment at present of the *écraseur* by those who otherwise would have used the galvanic apparatus.

ACCIDENTAL SEPARATION OF THE PLACENTA AT THE SEVENTH MONTH OF PREGNANCY:

ALARMING SYNCOPE: INDUCTION OF PREMATURE LABOUR: RECOVERY.

By G. E. Stanger, Esq., Nottingham.

Mrs. H., aged 36, mother of three children, healthy, and moderately robust, had arrived at the end of the seventh month of pregnancy, when she took a long walk on the 20th March, 1861. On her return home, and even before she arrived there, she felt extremely faint, and was scarcely able to walk. She soon became so alarmingly exhausted, that a messenger was sent for me in great haste, as her husband thought she was dying. On my arrival, at 3.30 p.m., I found my friend, Mr. Higginbottom, in attendance. The patient was lying prostrate on the bed, blanched, and in a state of syncope. She could only speak in a whisper; but she complained that her body felt very large, hard, and distended. The pulse was very indistinct and fluttering, and her whole appearance indicated extreme danger. She was not aware that she had used any undue exertion, or that she had slipped or injured herself in any way; but I felt convinced that hæmorrhage had taken place into the womb, and was in all probability still going on. The abdomen was as large as might be expected at the expiration of the full term of pregnancy. No fœtal sounds could be heard; and the patient remarked that she had not perceived any movement of the child after leaving home in the morning. At this time there was not the slightest hæmorrhage externally; neither was there any indication of the approach of labour; and, on examination *per vaginam*, the os uteri was in its normal condition.

Under these circumstances, both Mr. Higginbottom and myself felt some difficulty in deciding what course we should pursue; for, on the one hand, we feared that, if we did not interfere, and the hæmorrhage continued, she must inevitably sink; and, on the other hand, if we attempted to induce premature labour, the blood might flow more rapidly as soon as it was allowed to escape from the womb, and death might ensue before we had accomplished the delivery.

We determined, therefore, to wait for a time, especially as there seemed to be now and then an attempt to rally; and we hoped that the os uteri might begin to dilate.

She continued in much the same state during the evening. Mr. Higginbottom remained with her the whole time, as I was only able to call occasionally, in consequence of another engagement.

At 10 p.m., the symptoms not being in any degree improved, we decided on the propriety of bringing on labour; but, before doing so, we requested the opinion of Mr. Wright, the senior surgeon to the Nottingham General Hopital. Mr. Wright at once recommended this practice, and considered that the situation of the patient was so critical that it was doubtful whether she would survive the operation. Soon after this advice had been given, hæmorrhage began to take place from the vagina in considerable quantity; and the syncope became still more alarming. I, therefore, immediately introduced a straight silver catheter into the uterus, and let off the liquor amnii. By the conjoint and persevering efforts of Mr. Higginbottom and myself, the os was sufficiently dilated to allow of a foot being brought down; but so rigid and unyielding was it that it was a long time before we could succeed in laying hold of the second foot, and even then the exertion required to extract the body was so great that the head was separated from the trunk, which, of course, greatly retarded the operation. We succeeded, however, at length, in removing the head; and we were rejoiced to find that during the two hours that we were engaged in effecting the delivery, very little hæmorrhage occurred. The placenta was removed without any difficulty, being already partially, if not altogether, separated. Slight hæmorrhage occurred about half an hour after; and great faintness and exhaustion continued for many hours; but the flooding was checked by the application of firm pressure. The patient recovered in a few days without any drawback.

Remarks. I think it can scarcely be questioned that the plan which was pursued in this case was the only practicable one Whether the operation ought to have been performed earlier. may, perhaps, admit of some difference of opinion. If I were to meet with another case of the kind, I should, as soon as I was satisfied that a separation of the placenta had taken place, puncture the membranes, and then wait for the appearance of urgent symptoms before I forcibly dilated the os uteri.

The following case will shew the danger of delay in such instances.

Several years ago, I was summoned to a patient at the same period of pregnancy as the above. She was a person of remarkably lax habit, and had copious floodings in several of her confinements. On this occasion she had been exerting himself at the garden in pulling up vegetables, and went home very much fatigued. When I saw her, at 6 a.m., she was very much depressed, tossing about in bed, and bathed in cold perspiration. She said that she felt as if she should burst; and the abdomen was very hard and distended. There was no appearance of hæmorrhage externally; but I felt satisfied that blood was being effused into the uterus, and I was convinced that she could not continue long, unless something was done for her. I sent a messenger immediately for Mr. Wright; but she died before he arrived.

I made a *post mortem* examination of the body the same day, in conjunction with my friend, Mr. Thomas Wright. We found the placenta separated throughout its whole extent, and the uterus distended by an enormous coagulum.

In this case, doubtless, the hæmorrhage had been going on slowly during the whole night; and there seems very little question that, if the patient had been seen sufficiently early, and prompt measures had been adopted, her life might have been saved. I apprehend that some sudden exertion or strain in these cases produces a slight separation of the placenta; that the blood which is then effused acts as a wedge to detach more and more of it, until in time the whole mass may be separated without any blood escaping from the womb. I do not remember to have met with any account of such cases in obstetric works; and I should be glad if some of the readers of the Journal would favour us with their experience in relation to this subject.

I think it worthy of remark that no stimulants were administered in the case first narrated. I am satisfied, from my observation of the effects of brandy in cases of flooding, that it tends rather to favour the continuance of the hæmorrhage than otherwise; and, therefore, I have for some years entirely discontinued its use in such cases, and I believe that my patients have had, not only less hæmorrhage, but a more rapid recovery, in consequence.

Reviews and Notices.

The Physical Examination of the Chest in Pulmonary Consumption and its Intercurrent Diseases. By Somerville Scott Alison, M.D.Edin.; Fellow of the Royal College of Physicians, London; and Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. Pp. 447. London: Churchill. 1861.

Apart from its merits or demerits in regard to details, this work of Dr. Alison is one of no commonplace kind; since it opens up the way for a discussion on the practical utility of the modern aids to diagnosis, in the prognosis and treatment of disease. Are these aids to be regarded as improved substitutes for, or only as auxiliaries to, those general semeiotic indications which have in all past ages formed the main guide of the physician? This is a wide question; and to endeavour to answer it in its details is not our duty on the present occasion. Still we may, in a word, express what we believe to be the *juste milieu*—that the information derived from the physical aids to diagnosis has proved of the highest value to medicine; but that, in nearly all, if not in all cases, it requires to be conjoined with and tempered by the observation of symptoms, in order that it may be made applicable to diagnosis, and (what is of the highest importance) to prognosis and treatment.

These reflections on the bearings of the now pending case of physical signs *versus* symptoms have arisen out of the remarks with which Dr. Alison commences his book. He there, at first sight, throws in the weight of his authority—the authority of a physician to a special hospital for diseases of the chest—in favour of physical signs.

> "If," he says, "the question were proposed to me, whether, in the case of a patient supposed to suffer from pulmonary consumption, I would be disposed to regard as the more decisive of the question, evidence afforded by symptoms, or that given by the physical signs ascertained by the examination of the chest, I would reply, that I should much prefer the physical signs as the grounds on which to form my judgment." (P. 1.)

His main reasons for the preference here indicated are: that the symptoms of pulmonary consumption are more common to it and other maladies, and are more variable in their accession, than are the physical signs. There can be no doubt of this as a general rule: but he also admits (here virtually contradicting a theory advanced a few years ago by a highly talented and industrious colleague of his at the Brompton Hospital) that

> "In a large number of cases of phthisis, at an early period of the first stage, there is much reason to confess that physical signs are little developed. Numerous examples of phthisis, at an early part of the first stage, present themselves without our being able to detect physical evidence that can be held to be decisive. Even in examples of the disease of some months' standing, occurring in my own practice, physical signs have been so ill-marked as to have justified suspended judgment; and it has only been by means of subsequent evidence, that a decided conviction could be arrived at that the disease was all along pulmonary consumption." (P. 3.)

This candid avowal of the occasional fallibility of physical signs is sufficient to shield Dr. Alison from the charge—which might have arisen out of the paragraph first quoted from his book—of unduly exalting them as absolute and indisputable. And when, after this, he shows how percussion and auscultation in chest-disease in a measure take the place of examination of the secretions, or of ocular observation of disordered structure or function, in diseases of other organs, he goes no further than we are disposed to follow him. The point, then, at which we arrive, is this: that, as soon as physical examination of the chest can be brought to offer any indications in a suspected case of phthisis, these indications must be received as our principal guides in determining the presence or absence of the disease, and its actual stage.

Turning now from the general question to the book itself, we find that it is divided into three parts: of which the first, containing thirty-nine chapters, is devoted to the elaborate examination of the signs presented in the several stages of phthisis; the second, containing six chapters, to a description of the various means of investigating the condition of the respiratory organs; while the third consists of a reprint of various papers bearing on physical examination, which have been published by Dr. Alison in sundry periodicals. To attempt to analyse or criticise *seriatim* a work of such detail, and in regard to some of the special points in which so many different opinions may be held, is a task far too great for our space. Our attention, then, must be limited to a few salient points.

A principal peculiarity in the work is the assigning to perforation or pneumothorax a place as a *fourth* stage of consumption. Dr. Alison says that "he has found perforation or pneumothorax so common an event, and it is signalised with such strongly marked characteristic signs, that he has been induced to make this pathological condition a stage by itself—the concluding stage of the disease."

Perforation, Dr. Alison says, is a natural consequence of progressive excavation; and it would be almost inevitable, but for the presence of pleural adhesions in the third stage. Yet he is satisfied that it does occur in a considerable proportion of advanced cases of phthisis; and that it is not more often recognised he attributes to its occurrence at a period when the condition of the patient not only denotes examination to be useless, but generally calls for non-disturbance and quietude.

> "The physical signs," says Dr. Alison, "of the fourth or perforation stage are very remarkable and interesting. A greater difference holds between these signs and those of other stages of phthisis than between those of any two of the other stages. The most conspicuous signs of the fourth stage, in reference to auscultation and percussion, are absolutely new, and not a mere increase of those of another stage. They take the place

to a large amount of the signs of the third stage, to which they suddenly cause a cessation or bring an abatement.

"The physical signs of phthisis in its fourth stage are so different from those observed in the previous course of the disease, that on this account it is not only natural, but very conducive to the avoidance of important errors in diagnosis, and even to the very discovery of the nature of the disease itself, that a broad line of demarcation should be established between this and the preceding period of the malady. To continue to treat this period as an accidental condition of the third stage is assuredly not consistent with the novelty and importance, and even antagonism, of the new signs, and with the marked alteration in the morbid anatomy upon which they depend, and with the sudden access of most distressing symptoms.

"The formation of a new stage, that of perforation, will serve beneficially to call more particular attention to the accident of perforation, and to cause this condition to be better studied, to be more looked for, and, I am convinced, to be less frequently altogether overlooked." (P. 272.)

The physical signs of this stage are, in brief, the following:—The percussion-sound is tympanitic, being remarkable for loudness, extent of area, air quality, and hollow character. So different is this from the dull percussion-sound ordinarily associated with consumption, that the medical attendant may imagine that it proceeds from a remarkably resonant lung. Dr. Alison states that he has known this mistake to be made. Gradually, the tympanitic sound becomes diminished, and even replaced by dulness at the base of the chest, in consequence of effusion. It also undergoes other changes, and presents varieties in intensity, frequently in connection with variations in the quantity of air in the pleural sac. It is sudden in its appearance; is generally confined to one side; and is usually accompanied with other signs indicative of the occurrence of perforation. The duration of the tympanitic sound is short—commonly a month, though Dr. Alison has known it to continue a year. In a large proportion of cases, it never ceases during life; but in a few instances, it becomes replaced by the restored dulness of the third stage.

The characteristic respiratory sound of the fourth stage of phthisis is the amphoric, varying in character and intensity both in different cases, and sometimes even in the same case at different times. It generally accompanies both inspiration and expiration; but sometimes it is only to be elicited by forced inspiration.

The other principal signs of the perforation stage are, metallic tinkle, occasional splashing sound, augmentation of the vocal resonance and fremitus in most cases, frequent increase in the size of the chest on the perforated side, and rounding of the same part, excess of the respiratory movements, and displacement of the opposite lung and of the heart.

The second part of the book is commenced with some excellent practical directions on the subject of examining the chest. Percussion is next taken into consideration. The means of performing it are discussed; and the merits of simple percussion, of the percussion-hammer, of simple pleximeters, of Dr. Aldis's echometer, and of Dr. Sibson's pleximeter, are examined. While Dr. Alison has—here as elsewhere—good words to say of everything of which any good can be said, he manifestly prefers the old simple percussion-instrument—the well-practised fingers.

We now come to chapters on Auscultation—a subject to which the author appears to have paid very considerable attention in regard to instruments. Any one who wishes to know about every modern stethoscope which ingenuity has invented, will have his desires satisfied here. Dr. Alison himself has devised, and has a very high opinion of, *a differential stethoscope*, by which the auscultator is enabled "to collect sounds from two different parts of the chest, consecutively or simultaneously, and to convey them separately to the two ears." The construction of the instrument is as follows:—

"The differential stethoscope has two tubes; one for each ear, and, instead of communicating with one collecting cup only, as in the case of the double stethoscope, they have each a separate cup. It presents a separate stethoscope for each ear. They are mechanically combined for facility of management; but they are, in an acoustic sense, totally separate. The tubes are partly made of metal, and partly of elastic tube, to admit of some degree of motion. The two tubes are connected together, as in Camman's (double) stethoscope, by a jointed metal bar and an India-rubber band. . . . The instrument has two ear-knobs for insertion into the respective ears." (P. 331.)

Dr. Alison expresses in high terms his conviction of the utility of this instrument; and there can be no question that, as far as his own experience has led him, he has good grounds for his opinion. It must be granted further, that the power of comparing the sounds of two different parts of the chest at one and the same moment would be a valuable acquisition to any stethoscopist; but to the universal application of this instrument there is an obstacle, to which we do not find reference made by Dr. Alison; we mean the unequal hearing-power in the two ears (altogether short of deafness) in some persons. If we remember rightly, at least one distinguished auscultator in this metropolis hears better with one ear than with the other. To one in such a state, especially if he were not aware of it, the differential stethoscope might afford deceptive information, especially in regard to the finer differences of sound, such as are present in the early stages of phthisis. In making these remarks, we do not wish to depreciate Dr. Alison's instrument, but merely to throw out a necessary caution.

Chest-measurers, the pneumatoscope and sphygmosphone, goniometers, spirometers, specula, the laryngoscope, and other instruments of the kind, are carefully and fairly described in the concluding chapters of this part.

Of the collected papers contained in the third part, we can merely enumerate the titles. They are—

1. On Measuring the Configuration of the Chest in Disease. (From the *Archives of Medicine.*)
2. On the Change of Form in the Chest in Cases of Disease. (*Ibid.*)
3. The Differential Stethophone, and some New Phenomena observed by it. (From *Proceedings of Royal Society.*)
4. On certain Auditory Phenomena.
5. The Employment of Water in Auscultation. (From *Medical Times and Gazette.*)
6. The Sphygmoscope: an Instrument for indicating the Movements of the Heart and Blood-vessels. (From *Proceedings of Royal Society.*)

7. Sphygmoscopes: their Construction, Objects, and Mode of Employment. (From *Medical Times and Gazette.*)

Of Dr. Alison's book we have been led to form a decidedly favourable opinion. As an exposition of a special chapter of a special subject, the work is such that he who would write a better would have no easy task. It bears throughout evidence of the author's intimate knowledge of his subject, of his talent in dealing with it, and of his assiduity in its investigation.

The Causes and Treatment of Imperfect Digestion. By Arthur Leared, M.D. Second Edition. Pp. 218. London: 1861.

Dr. Leared has the good fortune to see his treatise reach a second edition within a year. His little book is doubtless already known to our readers, and, therefore, now requires little comment from us. We need hardly say, that it is no easy task to treat successfully of the derangements of a function which has been of late years so well attended to and worked up by different authors of celebrity. The great difficulty of properly managing the disorders of the digestive organs depends, no doubt, in great part, upon the difficulty of ascertaining the causes which produce the symptoms; and, notwithstanding all our modern enlightenment on the subject, we are still much in the dark on this point. In pepsine, as a help to the stomach in its difficulties, Dr. Leared has no faith. He says he is obliged to decide against pepsine; and so dismisses this medical material from consideration — another remarkable example illustrating the differences of doctors' opinions. We fancy that Dr. Leared will find some great authorities ready to break a lance with him, also, when he says that "Outward applications do not require much comment" as remedies for stomach affections.

The treatise is a sensible composition of facts and precepts; and the fact of its having so soon arrived at the happy land of a second edition shows, that if the stomach and its appendages are the best sinned against organs in the body, the sinners are glad enough to look about for solation and ease from the evil consequence of their infringement of the organic laws.

The Stomach and its Ailments practically arranged; to which are added, the Intestinal Canal and its Obstructions. By W. S. Oke, M.D., President of the Southampton Medical Society; Senior Physician of the Royal South Hants Infirmary; etc. Pp. 100. London: T. Richards. 1861.

This little work is a reprint, with additions, of a series of papers which appeared two years ago in the British Medical Journal. The author's physiological and pathological views are not altogether such as to satisfy those who are acquainted with the results of modern investigations; but, as embodying the experience derived from a practice extending over many years, the book will afford many useful hints to those engaged in the treatment of disorders of the stomach and intestines.

DR. BEALE'S LECTURES

ON THE

STRUCTURE AND GROWTH OF THE TISSUES OF THE HUMAN BODY.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, 1861.

The second lecture was delivered on April 15th. Dr. Beale commenced by referring to the supposed case of a physician, with plenty of time at his disposal, who had a love for work, and was anxious to study the nature of any disease. Such a man would continually feel desirous of ascertaining the actual changes which are going on in the organisms of his patients while they were under observation. He would very soon find that it was absolutely necessary to work at morbid anatomy and pathology, before he felt in a position to prosecute any special inquiry. He would be driven to work at the minute anatomy and chemistry of textures in disease; and soon he would discover that many fundamental questions of mere anatomical demonstration had not been determined, and the most conflicting views, as to the order of growth of textures and their action, would prevent him from feeling any confidence in his work. Next he appeals to the healthy structures; and now he is dismayed at finding that we are not sure how nerves terminate in various tissues; and, while in chemistry he finds the indefinite term "extractive matters" applied to a considerable quantity of matter of the nature of which he can learn very little, so in anatomy he hears of areolar or fibrous tissue, or indeterminate tissue, existing everywhere, and especially abundant in the very situations in which he would expect to find nothing unnecessary, and the arrangement of the tissues of the most beautiful character. He looks for some general explanation of the appearances he sees, and he finds cells described in works, and delineated with most distinct cell-walls, contents, and nuclei; but when he comes to examine the tissues, it is but seldom he detects anything answering to the ordinary description of a cell; and in so simple a structure as cartilage, he can scarcely find any two observers who agree as to the meaning of the appearances observed. He inquires how a tissue grows; which is the oldest part, and which the youngest? —how food becomes tissue?—where inanimate matter becomes living?—what is actually living, and growing, and changing, and what has ceased to live and change, and has grown to its full dimensions? Every one who has thought earnestly on medicine during the last few years, must have frequently asked himself these questions.

The lecturer now proceeded to remark on the history of the life of one of the simplest living beings, and consider how its growth and other characters are influenced by conditions somewhat different from those under which it grows most favourably.

When we attempt to examine the structure of the simplest forms of living beings, we cannot but regard the extreme minuteness of many independent organisms which live, and grow, and increase their kind, with the utmost astonishment. So also, in all other living beings, the living particles by which the active changes are effected are, there is reason to believe, far too small to be seen.

Of the *structure* of such organisms and particles, we have as yet learnt nothing by direct observation; but from carefully investigating the structure of larger bodies closely allied to these, as ordinary mildew, for instance, some conclusions as to the manner in which growth takes place may be arrived at. Dr. Beale had been led to certain inferences with regard to the structure of these simple forms of life.

In the course of the ensuing lectures, he would endeavour to prove that growth in all living structures occurs in the same manner; that the matter to be animated passes in the same direction in all; and that the living particles invariably pass through certain stages of existence, and end by giving rise to material totally different in composition from the living particles. This may be further altered, but it cannot reassume its former characters, properties, or powers. The differences in the results of the life of different living organisms depend upon their powers, which they have derived from their predecessors.

Living particles cannot be distinguished from each other by microscopical observation; and, in consequence, it is utterly impossible, from the structure of a living particle, to predicate its office, or the results of its living, nor can we thus tell whether it has belonged to one of the lowest or highest organisms, to an animal or to a plant.

The word *living* was used by Dr. Beale in a general sense, meaning that active changes, some of which can be explained by physics or chemistry, while others cannot, are taking place, or are capable of taking place, under favourable conditions; and by *dead* he understood matter which has already undergone these changes, and which is brought again under the uncontrolled influence of physical and chemical forces. The shaft of a hair, and the particles of the epithelium on the surface of the cuticle, are just as dead *before* they are *detached* from the body as afterwards; but there are constituent elementary parts of every age leading uninterruptedly from these dead particles, which have no power of increase, to those which have only just commenced their existence, which are nearest the vascular surface, and are undergoing rapid multiplication. It is as impossible to indicate the precise moment at which a living particle ceases to be able to produce particles like itself, as it is to announce positively the day or hour of our lives when we cease to ascend towards the highest point of vital activity we are to attain, and begin to decline.

Every elementary part consists of germinal matter, and of formed material which was once in the state of germinal matter. Just as, in the cuticle on the surface of mucous membranes, and in certain glands, elementary parts exist of every age, so every tissue and organ in the body is composed of elementary parts in every stage of existence, and arrangements exist by which the oldest *formed material* may be removed. Some formed material is resolved into simpler compounds, and removed very soon after its formation; while in certain tissues the formed material is very permanent; and it is doubtful, if, in certain cases, the formed material which now exists in our bodies will not remain in much the same state as long as we live. Most important changes may be brought about by the fluid in contact with this formed material. In health it is bathed with a fluid which preserves its integrity; but in certain cases the composition of this fluid is so altered that the formed material undergoes changes closely resembling those which may be induced in it artificially, if kept at the temperature of the body, in a fluid which will not protect it from the influence of oxygen. Under these circumstances simple organisms (fungi) will soon destroy it. These points show that we must not look upon disease as a condition essentially different and separated by a distinct line of demarcation from the healthy state, but rather look for a disturbance in the rapidity of the processes of multiplication and decay of the elementary parts, and alteration in the composition of the fluid which brings to them nourishment, or which prevents the uncontrolled action of destructive agents on the formed material.

If the spore or any segment of the stem of a simple fungus be examined, it will be found to consist of an external capsule, enclosing some very transparent matter. The outer capsule is comparatively firm, and hard and unyielding; but the internal substance is soft, perhaps almost diffluent, and is easily destroyed. It may be washed away and removed; while the external capsule will retain the same characters which it possessed before it was disturbed. Let us avoid all terms which involve theories, and consider how these parts are formed. The new matter is certainly not added on the external surface; for if this were the case the outer membrane would increase in thickness, while the mass within would remain of the same size as when it was first seen. In some instances the outer membrane increases in thickness, and the matter within also increases; but sometimes the outer membrane remains very thin, while the matter within is seen to undergo a considerable increase. After the whole mass has reached a certain size; it divides; and the process is repeated in each of the resulting structures. Very soon, perhaps, millions of minute organisms are produced. When this division does not take place very rapidly, the external membrane of each particle is observed to increase in thickness, and generally, it may be said that the slower increase occurs the thicker this becomes.

Is the new matter added just within the outer membrane? If this were so, at one time matter like that of which the membrane is composed would be formed, and at another the inner soft material must be produced. It would follow, too, that in some cases the material must be entirely converted into the one substance, and in others it must give rise alone to the development of the other. The thickening of the external membrane is often produced at the expense of the germinal matter within.

Is the external hard material formed around the internal substance? This question has been already answered negatively. From a consideration of numerous observations, Dr. Beale was convinced that the new matter—the pabulum, the nutrient material—which is about to become a part of the living mass, passes through the external membrane, and amongst the particles of which the central mass is composed. He believed it passes into the interior of these particles, and, having been brought into very close contact with their component particles, becomes endowed with the powers they possess, and is then living.

The doctrine to which he had been led is shortly this —that the smallest living particles of all living beings are spherical; and he believed that these are composed of spherical particles *ad infinitum.* The inanimate matter passes into the spherical particles, and there becomes endowed with their wonderful powers—in fact, becomes living. The living spherules move in a direction from the centre towards the circumference of each spherule to which they belong. Their tendency to divide is due to the same force, which compels them to move constantly *from* the centre where they became living. Each particle is preceded by those which became living before it, and succeeded by others which were animated since it commenced to exist. This movement outwards occurs in the living particles of all living beings, and its rapidity determines the rate at which the structure grows.

The particles, in passing outwards, gradually lose their power of animating matter; and at last, having arrived at a considerable distance from the centre, where they became living, undergo most important changes, and are resolved into substances having properties very different from those which the living particles possessed during the earlier periods of their existence. The particles now cease to move; they lose their active powers, and perhaps coalesce to form a firm hard substance like the external membrane of the mildew; or they may become resolved into compounds which are completely soluble in fluid, which are perhaps very soon decomposed into substances of a much simpler composition. This outer substance, resulting from changes occuring in the oldest particles of the inner matter, he proposed to call *formed material;* and the living matter within, which may increase in the most rapid manner, which gives rise to every tissue, and is in fact the growing living part of every structure, from which all new structures originate, he would speak of as *germinal matter*. The characters of the *formed material* depend upon the powers of the particles of the germinal matter, and it is affected by the conditions under which these grew. The powers of the germinal matter depend upon those of the germinal matter which gave it origin. As the composition of the *formed material* depends entirely upon the properties of the germinal matter which produced it, the substances resulting from the disintegration of the formed material, and the compounds resulting from the action of oxygen on these are peculiar, and differ materially from each other, just as the properties of the *formed material* differ in the various tissues and in different living beings. It is, therefore, very doubtful if these substances will ever be produced independently of living matter. Undoubtedly, if the component elements could be brought within the sphere of each other's action under the same condition as in the living organism, the same compound would result; but, as these conditions cannot be brought about artificially, and cannot be conceived to exist except in living bodies, this is not saying much. Every living particle can alone spring from preexisting particles; and every particle of albumen, casein, fibrine, etc., is produced under conditions which can only exist in living particles.

In many cases, certain of the particles of the germinal matter grow more slowly than others, and remain perhaps for a long period in a comparatively quiescent state. These masses are generally spherical or oval, and they have a power of resisting the action of external circumstances which would destroy the active portion of the germinal matter. These are the so-called nuclei, and from them new structures may spring, even if the germinal matter in which they lie be destroyed. When they become active, certain minute particles within them may become new nuclei, while the particles of the original nucleus increase and pass through the various stages of their active existence, and at last became resolved into formed material. Generally, when the conditions under which an elementary part is placed are very favourable for the growth of the germinal matter, the most rapid increase in size may be observed to occur in the particles just within the envelope of formed material; and not unfrequently numerous spherical masses of germinal matter may be seen in close contact with the membrane, and therefore as near as possible to the nutrient matter.

In some cases, after a layer of *formed material* has been produced externally, and the whole mass has reached a certain size, certain particles of the germinal matter become resolved into *formed material*, which collects as one mass, or in the form of several separate particles, which may accumulate amongst the particles of the germinal matter. If this process continue for some time, the germinal matter forms a thin layer between this mass of formed material, which Dr. Beale proposed to call *secondary deposit*, and the outer membrane or envelope of formed material, a position in which the germinal matter (primordial utricle) of the vegetable cell and that of the fat-vesicle (nucleus) are found.

Regarding a growing spore of mildew as an elementary part, it consists externally of *formed material*, within which is the *germinal matter.* Certain portions of the germinal matter are not in a state of great activity like the remainder; and these are nuclei from which new growth may proceed, if the formed material and the remainder of the germinal matter should be destroyed. If there be no nuclei, no future elementary parts can be formed; and the death of the germinal matter renders it impossible that new structures can result from the mass.

Alkaline colouring matters have no effect on the *formed material*, but colour the *germinal matter* very strongly. In some very interesting specimens, coloured by immersion in an ammoniacal solution of carmine, obtained from certain fibrous textures, there is no distinct line of demarcation between the germinal matter and the formed material. Most externally is the *formed material* quite colourless; then comes a layer of very young and imperfectly hardened formed material, which is slightly tinted; next, germinal matter, darkly coloured, and amongst this nuclei most intensely coloured. The structure which is most intensely coloured is farthest from, and that which is not coloured at all in immediate contact with, the colouring matter. The carmine can be made artificially to pass through the layers of formed material, unaltered by them, to the germinal matter, where it becomes precipitated, probably in consequence of the acid reaction of the germinal matter.

British Medical Journal.

SATURDAY, APRIL 27th, 1861.

WHAT IS REFLEX PARAPLEGIA?

The history of paraplegia, as we now read it, is quite of modern date; and it is only during the past few years that we can boast of having obtained an insight into the most important features of the disease.

Several authors, we need hardly say, have preceded Dr. Brown-Séquard in this field of research, and have distinctly pointed out the existence of the affection.

Dr. Graves, in his lectures on Paraplegia (1843), has told us—

> "That a most important and influential cause of paralysis has hitherto been nearly overlooked—a cause which, commencing its operation on the extremities, and not on the centres of the nervous system, might, by a reflex action, produce very remarkable effects on distant parts."

He gives instances of slight amaurosis resulting from exposure to a keen wind; of paraplegia from enteritis, from uterine disease, from urethral irritation, from exposure of the body to cold and wet. The treatment he recommends for the disease is stimulating liniments and blisters, not to the spine, but to the legs and thighs; with strychnia and sulphur internally.

Mr. Spencer Wells also, in a lecture in the *Medical Times and Gazette* (Nov. 14th, 1857), gives an excellent *resumê* of the subject. Dr. Handfield Jones, in a paper on Inhibitory Influence in the British Medical Journal for Feb. 5th, 1859, maintains that an afferent nerve may communicate a depressing influence to the centre, and throw it as it were out of gear.

Dr. Brown-Séquard is, however, the latest writer on the subject. He gives us an excellent account of the affection, and also a novel explanation of its nature—an explanation, however, which we fear must, for the present, remain hypothetical.* Let us see what it is that he tells us on this important subject.

The two most frequently observed and clearly defined forms of paraplegia are, reflex paraplegia, and paralysis depending upon myelitis or disease of the spinal cord. Heretofore there has been no proper line of distinction drawn by pathologists between these two varieties of paralysis; but this distinction is absolutely necessary for the important purposes of rightly directing the practitioner's treatment; medicines which are suitable in the one kind being injurious in the other.

Paraplegia depending upon disease or injury of the spinal cord has been long well understood by us all; but what is meant by *reflex paraplegia?* Is there really such a disease? By reflex paraplegia is meant that kind of paralysis of the lower limbs which results from an excitation of the spinal cord, the excitation being conveyed to the spine through a sensory nerve. For example, some part of the body, say the uterus, is irritated, injured, or displaced; the effects of the displacement, etc., are appreciated by sensory nerves, and are thereby conveyed to the spinal nervous centre, and, by the action which they there produce, cause those changes to occur which result in paraplegia. According to Dr. Brown-Séquard, the paralysis is produced in the following way. The excitation aforesaid acts either upon the blood-vessels of the spinal cord itself, or on those of the motor nerves proceeding from it, or upon those of the muscle. This is what, pathologically speaking, is meant by reflex paraplegia. Through this excitation, spasmodic contraction of the blood-vessels is produced, and consequently a deficient supply of blood is sent to one or other of the aforesaid parts.

Dr. Brown-Séquard has, however, first of all, before proceeding to speak of its treatment, etc., to answer the objections of those who deny the existence of the affection; and there are a few men of high repute who do deny the thing. The answer of Dr. Brown-Séquard is, on the face of it, the best which can be given. He leaves transcendental physiology, and asks his readers to look at a plain series of facts which he unrolls before their eyes, and which are comprehensible to the understanding of the youngest and the oldest of us. To us, we must confess, these facts demonstrative are as "plenty as blackberries"; and we cannot imagine that any one except a *téte-montée* physiologist or an absolute specialist can refuse to accept the consequences which flow from them. A female suffers from paraplegia. Her uterus is displaced. The abnormal position of it is rectified, and the paralysis disappears. Amaurosis exists in combination with irritation of the frontal nerve; the frontal nerve is divided, reflex action from the irritated spot is cut off, and sight rapidly returns. Neuralgia of external parts exists; and the patient's auditory powers are good, bad, and indifferent, according to the absence, presence, and acuity of the neuralgia. Dentition, worms, irritation of the womb, diphtheritis, etc., are at times associated with various kinds of partial paralysis; and *sublatâ causâ tollitur effectus* has been duly observed in such cases.

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* Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities, by C. E. Brown-Séquard, M.D., F.R.S.

Now, the proof that these paralyses do not depend upon disease of the nervous centres is this very plain one; viz., that the removal of the peripheric irritation—the worms, the displaced womb, etc.—could not in such case have removed the paralysis. And if a very hardened sceptic in these matters should still object that, nevertheless, the cures in such cases might have been more properly called rather a coincidence than a consequence—we should advise him to consult Dr. Brown-Séquard's book, and study his witnesses. The collection of cases there to be found, derived from numerous different sources, will, we fancy, demonstrate to the satisfaction of every one—except of those who, apparently for argument's sake, will on occasion deny that B follows A in the alphabet—that *reflex paralysis* is a medical fact.

In these cases it will be seen, that what Dr. Brown-Séquard calls the *outside irritation* preceded the paraplegia, and that cure of the latter quickly followed the removal of the irritation. Again, in many of these cases, the paralysis increases and decreases with the condition of acuity of the outside irritation; and no treatment has any effect in removing the paralysis so long as the irritation was left unremoved. In some of the cases, the paraplegia appeared, disappeared, and reappeared several times over with the appearance, disappearance, and reappearance of the outside irritation. "Can there," says Dr. Brown-Séquard, "be more decisive proofs that it is the outside irritation starting from some sensitive nerves in various parts of the body, which produces the paraplegia?"

Besides, if we do not accept this view of the case, we are left without any means of explanation of the paralysis in most of these cases. The idea of these kinds of paralysis being produced by, for instance, pressure of the uterus on the obturator nerves or on the sacral plexus; or by the action of poisonous matters accumulating in the blood in retention of urine, or in diphtheritis, or enteritis, is very chimerical.

But, it is objected, we cannot accept this reflex paraplegia; for it is impossible to understand how it can occur. And here the physiologist steps in, and answers without hesitation—*les pieces à la main*—that, on the contrary, it is very easy to show how a paralysis can take place by a reflex action starting from a sensitive nerve. And practitioners who pride themselves on being practical men, and *not* physiological physicians, must, we suppose, here take a lesson from the physiologist.

An outside irritation may produce paraplegia by *causing reflex contraction of blood-vessels* in two ways. It is proved beyond doubt, that blood-vessels have similar relations to the nervous system, to those which muscles of animal life have to this system. Blood-vessels contract with energy and sometimes pass into a state of prolonged spasm; 1. when their motor nerves are *directly* excited; and 2. when excited through the cerebro-spinal axis through irritation applied to some centripetal or excito-motor nerve. In *these contractions of blood-vessels* we find the cause of paralysis. The contractions may occur: 1. In the blood-vessels of the spinal cord; 2. In the vessels of the motor nerve passing from the cord; and 3. In the vessels of the muscles themselves.

Dr. Brown-Séquard has, he tells us, seen contraction of the blood-vessels of the pia mater take place in the spinal cord, when the lobes of the kidney, or the vessels and nerves of the suprarenal capsules, were ligatured; and the contraction is generally greatest on that side of the cord corresponding with the side irritated. Paralysis of the lower limb has been known to follow extirpation of the kidney on the same side of the body. Again, reflex paraplegia may be produced by *insufficiency of nutrition*, resulting from this contraction of the blood-vessels. This explanation of the paraplegia as being a consequence of contraction of blood-vessels, must, however, at present be received as theoretical.

Another argument in favour of this view of the case is derived from the fact of the normal condition of the spinal cord—the absence of all visible signs of disease—observed in persons who have died after presenting symptoms of reflex paraplegia; as in cases of paraplegia associated with retention of urine.

Thus, then, here stand the facts touching Reflex Paraplegia:—1. There is no organic disease of spinal cord; 2. The paralysis will rapidly disappear when the source of reflex irritation is cut off; and 3. The vascular supply of cord, of motor nerves, and of muscles is under the influence of reflex action.

And now, then, we see the grand anatomical distinction between reflex paralysis, and paralysis associated with myelitis. In the first case, there is diminished, in the second, increased vascularity of the cord. In myelitis, the colour, the consistency, and the vascularity of the cord, are visibly changed. In reflex paraplegia, these qualities of the cord are found, to all appearance, unaltered after death. And here, therefore, as Dr. Brown-Séquard tells us, we have at once before us two groups of paraplegic diseases—one in which too much blood is circulating in the spinal cord, and one in which the very opposite condition of the cord exists. And then, he adds, consider the value of a right discrimination between them. The remedies which suit one group are actually injurious in the other. There are some, and he says that he can prove the fact, that diminish the amount of blood in the spinal cord; and there are others that increase the quantity. And yet, these remedies are often blindly and indiscriminately employed in paraplegia. Mercury, ergot of rye, and belladonna, Dr. Brown-Séquard asserts, diminish the blood, and strychnine and brucia increase the blood in the spinal cord. On another occasion we will see how Dr. Brown Séquard proves this assertion; and also what he has to say of the diagnosis and treatment of this remarkable affection, reflex paraplegia.

THE WEEK.

A most desirable object was last week brought before the public—the establishment of a Lunatic Asylum for the poorer portions of the Middle Classes; and we sincerely trust that Lord Shaftesbury and the gentlemen who assisted him may succeed in their endeavours to establish such an institution. It is, indeed, high time in many ways that the good intentions of the benevolent should be turned towards the particular class of society here referred to. We have been now so long accustomed to consider the wants and miseries of what are called the poorer classes, that we have almost forgotten the existence of a class of persons, who are equally deserving of compassion and consideration with the lower ranks. Indeed, we have reason to doubt, when we hear of periodical strikes amongst mechanics, and of the enormous sums of money handed over by one set of mechanics to another set during their "outing" on strike, whether at the present moment a good deal of our charity is not very ill directed. And when we are told that the working classes of this country spend something like fifty millions sterling *per annum* in the articles of beer and spirits, and when we put by the side of this social science statement the fact, that a large proportion of our hospital patients become patients through the ill effects, direct or indirect, of drink—we surely have something like good grounds for questioning the wisdom of many of our modes of distributing charity. Medical men know right well, that many individuals of the middle classes are often as much objects of our benevolence as are the sick of the working classes; and certainly in no case can they be more so, than when afflicted with insanity. The means of the individuals to whom we refer do not enable them to compass the luxuries of a private lunatic asylum; and naturally enough their friends wish a better resort for them, than that which bears the stigma of pauperism. It is to meet this want that Lord Shaftesbury and his friends now appeal to the benevolent. An account of the meeting is given at another page.

Lord Ebury is evidently what is called a political economist. He has gathered his ideas of human nature from a creditor and debtor sort of account of man's proceedings. To sell in the dearest and buy in the lowest market, and make the most of your goods, *per fas et nefas*, appears to be in his view the natural instinct and duty of men, who (not being noble lords) live in a commercial country. With such an estimate of man in general, and with an ignorance only equalled by its insolence, the noble lord has delivered himself of his views of the moral perceptions of those of our medical brethren who manage private lunatic asylums: "Private asylums were entirely founded with a view to the profit and loss of the principals; and when the duty of cure was on the one side and the inclination of profit on the other, it was not difficult to judge by the universal rule of human nature to which side the balance would incline." According to this assertion, it is the natural instinct of every doctor who has a patient, to keep him ill as long as he can, or, at all events, not to do his best to cure him. We should hardly have thought that any man, who does the benevolent as a regular thing, could have uttered such an ignorant calumny on our profession; and can only regret that his lordship, in his experience of medical human nature, has been so particularly unfortunate as to have been led to such conclusions. One thing consoles us; and it is this, that we believe his lordship is in reality very ignorant of our professional proceedings. If we are not much mistaken, he is a great admirer of quacks; and indeed a great gun, often fired off by homœopaths. We, therefore, may very reasonably conclude, that it was not through intercourse with our professional brethren that he picked up his degraded notions of a medical man's honour and honesty. So we will leave him to settle his account with his homœoquacks.

Science is to be represented in the *Upper House* in Austria—its House of Lords—by Rokitansky, "the renowned Professor of Anatomy in the great Hospital of Vienna," as the journals designate him. The besotted and benighted government of the Hapsburgs has, therefore, stolen a march upon our civilised and enlightened insular rewarders of science. Who in our profession when he reads these lines will not think of Sir Benjamin Brodie and the House of Peers? And why is Rokitansky called to the *Herrenhaus?* Solely because his peculiar scientific knowledge may be of use to his country.

A year or two ago, theological midwifery had a small agitation in Dublin. It has now had a large one in Paris; and this time in reference to *post mortem* hysterotomy. We need hardly say that, practically, the discussion has left the question where it found it. It was hardly to be supposed that, at this time of day, a medical academy could be got to back the subtleties of medico-theologians. All that can be said upon the subject of *post mortem* hysterotomy in its different aspects has, however, been evoked by the discussion. MM. Depaul, Tardieu, and Devergie have delivered excellent discourses upon it. Those, also, who are curious in these matters may learn, by reference to the debates alluded to, what medical science and medical practice would become if subjected to theological doctrines. The *Union Médicale* says on this point:

> "You have always maintained the complete separation of science and theology; and you will now be encouraged more than ever to defend the independence of science, when you witness the exactions of theology. *Medicus sit Christianus*, said Hoffman or some one else, it matters not who; but the idea has been sadly abused. If by Christian is meant charitable—and this is the most sublime acceptation of the term—the idea is good; and in this sense the physician should be Christian towards all and everywhere. But, in that he is physician, he is neither Jew, nor Catholic, nor Mussulman—he is human; and that is saying everything."

The following prizes are offered *en séance solennelle* by the Academy of Sciences. For an investigation of the theory of optical phenomena—the question being chosen by the writer, a gold medal of 3,000 *fcs.* value is to be given. A prize of similar value is offered on the determination of the causes which influence the differences of position between the optical and photogenic foci. In the section of physical sciences, gold medals are offered for essays on subjects: the comparative anatomy of the nervous system of fishes: the study of vegetable hybrids in reference to their fecundity and their reproductive or non-reproductive powers; and the study of the changes which take place in the tissues of the embryo and the perisperm, and in the matters contained in the tissues during germination. The Montyon prize of a 800 *fcs.* gold medal will be adjudged to the work which has most contributed to the advancement of experimental physiology. One or more Montyon prizes will also be adjudged to works of those who may be considered to have advanced the art of healing, or to have discovered the means of diminishing the unhealthiness of any particular trade.

M. Bataille, Professor of Music at the Conservatoire, and an excellent vocalist, has presented the Academy of Sciences with a memoir on Phonation. M. Bataille was once a hospital interne.—In 1829, M. Caffe, Interne of Hôpital des Vénériens, extracted from the body of *une très belle femme de race Espagnole*, who died from ulceration of the larynx, a female child, who survived. The operation was performed half an hour after the death of the mother, and at the eighth month of pregnancy.—The French Academy of Sciences has this year been sparing of its prizes in the medical and surgical way; three prizes and two honourable mentions being the amount distributed. A critic inquires the cause: Is science on the decline, or is the Academy growing niggardly?—Ambrose Paré, says Velpeau, once put a patient suffering from tetanus in a dunghill, and cured him; hence came its cure by sudorifics and vapour-baths. Lisfranc took eight *kilogrammes* of blood from a patient, and cured him. In France, twelve cases of tetanus have been treated with woorara, and one only has recovered.—Dr. Theophilus Erselt of Prague reports that he has discovered minute pus-cells in the air of a chamber containing a number of ophthalmic patients. His (so-called) discovery was made by the aid of the aeroscope of M. Pouchet, modified by Professor Purkinje. He had previously satisfied himself that the disease was propagated by other means than actual contact. Many of the leading physicians of Vienna have, in consequence, set to work on the subject; and the *Cosmos* promises to give us the results of their observations.—M. Cloquet advises the Academy of Sciences to acclimatise a serpent of the non-venomous sort, whose useful qualities consist in destroying serpents of a different species to its own.—M. Garcia puts in a claim of priority as inventor of the laryngoscope.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South-Eastern. Annual.	Crystal Palace.	Wed., May 8, 3 p.m.

SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

Philip H. Williams, M.D., *General Secretary.*

Worcester, April 1861.

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

The College Session has drawn to a close. The University looks dull and torpid, the buildings deserted, almost devoid of the living will that moved so stirringly all winter; even the loungers about the gates have moved away to other lounges. The excitement and anxiety that precede the examinations have passed; the knots of students who, with trembling jokes and nervous laugh, occupied the quadrangle on the examination days, are seen there no more: their fate has been sealed for the next three months, and they are, most of them, away recovering from the chagrin of a recommendation to continue their studies, or enjoying the calm delight of being through. The various *cliniques* are now becoming more thinly attended; only disease, and death, and the medical officers, are in full activity. The number of students who went up for their first examination this year was unusually large; I believe, upwards of one hundred—an encouraging sign for the University. It is somewhat difficult to assign a satisfactory reason for the increase. Probably, many students desirous of obtaining the degree under the old regulations, have gone up sooner than they would otherwise have done; and perhaps the privileges, both in respect to practice and to university government, associated with the degree by recent legislation, have had their share of influence in increasing the number of candidates.

There was a great meeting of the students the other day to hear an explanation by Professor Christison of the new medical degrees to be conferred by the University, and to which I have referred in previous letters. The arrangements seem to be considered, among the students as well as the profession, highly satisfactory; but intense disappointment seemed to prevail, in consequence of the fact that the army medical board had resolved that the new degree of C.M. (master in surgery) which our University is in future to confer, would not be received as equivalent to a surgical licence from the Corporations. Considering that the University possesses two surgical professors—one of systematic, the other of clinical surgery, and that the education and examinations in that department are equal to those of any other institution in the kingdom, it is not easy to understand the reason for this. The influence of the corporations may succeed for a time in curtailing the privileges of the University surgical graduates; but their elevation to academical rank, and the stimulus thus given to surgery as a liberal profession, must ultimately overcome all opposition.

The most important recent event in the scientific world of Edinburgh was the reading of a paper by Professor Bennett, in the Royal Society, on the molecular theory of development. It was interesting, as placing in a clear and forcible light what can be said against the doctrine of the development of cells exclusively from cells. It is to be hoped that so able an exposition of that side of the question will be published in full. The Professor stated his conviction that, in order to make any progress into the philosophy of development in plants and animals, we must substitute for the hypothetical atoms of the philosopher and chemist the visible molecules of the histologist. These molecules, he thought, had in recent times been strangely overlooked in the attempts of physiologists to found what have been called variously, theories of growth exclusively from cells, or from germinal centres. He, therefore, directed the society's attention, first, to the nature and mode of origin of molecules; secondly, to their physical and vital properties; and, thirdly, to a molecular law which, he was of opinion, governed organisation. Molecules he described as particles varying in shape and chemical composition from the 4000th to less than the 20,000th of an inch in diameter. They were found in all organic fluids and solids, and were formed, first, by precipitation in or by the commixture of organic fluids; and, secondly, by the disintegration of previously existing textures. These he denominated histogenetic and histolytic molecules. In alluding to their physical properties, he referred at length to the researches of Mr. Rainy, who had carefully described the mode in which various bodies, often resembling a nucleated structure, were formed in viscous fluids. He also explained the laws of attraction, repulsion, and superposition, which apparently governed their production. He then described various phenomena presented by these molecules, which indicated that they were influenced by forces purely vital, such as the regular movements in the interior of vegetable and animal cells, the fact of their concentration and diffusion in pigment cells on the application of stimuli, light, etc., the cleavage of the yolk in the ovum, and several others. He then pointed out that all the great animal functions were essentially connected with changes impressed on masses of molecules, and referred, at great length, to the functions of generation, nutrition, secretion, and sensation, in proof of his statement. Lastly, he laid down the law he had deduced from the numerous facts previously detailed; namely, that all organic development consists in a series of formations of histogenetic and histolytic molecules. He mentioned numerous well-established facts in support of this generalisation, referring at length, in illustration of his views, to the history of the development of ascaris mysta given by Nelson, and to the process of nutrition in man, as observed in the successive formations of chyme, chyle, blood, tissues, and secretions. He concluded by stating that the application of the theory of molecular organisation to pathology and therapeutics would form the subject of another communication.

It will gladden the hearts of most old Edinburgh men among your readers to know that the Royal Medical Society flourishes in full vigour, and I think that those who have not studied here or have not been members, would willingly hear a little of the famous old institution. It is one of the most peculiar features of the Edinburgh school, and one of which we are very proud. Founded more than one hundred and twenty years ago, by a few earnest students, it was soon recognised as a valuable adjunct to the medical school. It became a favourite arena for the students, sharpening their wits, and debating the new views which were advanced from time to time. How often has that society listened to the enthusiastic praise or equally enthusiastic condemnation of the theories of the day, from the old doctrine of the *error loci* to syphilisation, cell-development, and the origin of species. It connects it with a bygone age to reflect that Oliver Goldsmith, Cullen, and Duncan were among its members; and it is a proud boast for it that Christison, Marshall Hall, John Reid, and many more, trained themselves in part within its walls. Its library is very valuable, and freely at the disposal of the members. But of the importance of this society let the late George Wilson speak. He says, in his *Life of Dr. John Reid*, "It is unquestionably the most distinguished among the student societies of Great Britain devoted to the prosecution of science. It has existed for more than a century, and during that period has numbered among its members the majority, probably, of the physicians, and many of the surgeons of this country and the colonies. It possesses a large and very valuable library, and an income which enables it to make continual additions to its volumes. It has had vicissitudes, as could not but be expected in so lengthened a career; but in general it has been eminently prosperous, and at the period when I write it is about to erect a new edifice for the accommodation of its members and its library, and to all appearance is renewing its youth." That new edifice has now for some time been occupied, and the business of the society pursued with increasing vigour. The session which has just finished has been in every way most successful, the number of new members much above the average, the papers almost all good, many of them excellent. The annual dinner was a great success. Besides representatives of the church and the bench, there assembled a large number of old members, belonging to all the different sections of the profession here. To see all these different men, not generally accustomed to associate, sitting down at the students' table, seemed like a little fulfilment of the prophecy about the wolf dwelling with the lamb, and the leopard lying down with the kid, and a little child leading them. It is certainly exceedingly pleasant to see the students' table graced by the brightest ornaments of the profession, by Christison and Syme, by Bennett, Miller, Simpson and Wood, Balfour and Laycock. The senior president of the society, Mr. Browne, made an excellent chairman; and among the guests was his father, one of our Commissioners in Lunacy, and a former president of the society. Old members, however, will hear with regret that the society has this winter lost its able treasurer, Mr. Macfarlan, whom all will remember as at once the Nestor and the Joseph Hume of the Royal Medical.

A vacancy occurs this summer in the medical staff of the Royal Infirmary. Dr. Keiller, the senior ordinary physician, retires, his term of office having expired. Dr. William Sanders, our extra-academical lecturer on Physiology, has been appointed junior physician.

Dr. John Brown, who some years ago surprised and delighted the public with a volume of *Horæ Subsecivæ*, has recently published a second series. None of the present papers possesses the professional interest that attached to the essay on Locke and Sydenham, and some others of the earlier fasciculus; but some of these, and especially the letter on his father's character, and the personal sketch of the great Dr. Chalmers, do honour alike to the head and heart of their author, and justify that feeling of pride with which we reflect that he is an Edinburgh practitioner.

Progress of Medical Science.

Causes of Leukæmia. It is now pretty generally admitted, that that form of anæmia which is characterised by an increased proportion of the white corpuscles of the blood, and to which the terms leukæmia and leucocythæmia have been applied, may arise from other morbid conditions besides those first pointed out by Virchow and Bennett. Dr. Corlieu, in some observations upon a case of the disease in question, recently recorded in the *Gazette des Hôpitaux*, speaks of its causes as fourfold, viz.:—

1. Hypertrophy of the spleen;
2. Hypertrophy of the lymphatic glands;
3. Hypertrophy of Peyer's glands; and
4. Hypertrophy of the liver.

Carefully recorded cases showing the coexistence of enlargement of the spleen with white-cell blood are now so numerous, that it is impossible to doubt that the two morbid conditions stand in the relation to one another of cause and effect. On the other hand, Virchow and Schreiber have both recorded cases, where there was leukæmia in conjunction with enlargement of the lymphatic glands, but where there was no hypertrophy of the spleen; and Schreiber has met with cases, where the same condition of the blood coexisted with great hypertrophy of the Peyerian glands. These observations are of much interest, as tending to confirm the views which are gradually gaining ground among physiologists, that the lymphatic glands, the spleen, and the glands of Peyer, approximate closely to one another in their functions; that, in fact, the spleen and Peyer's glands are nothing more nor less than modified lymphatic glands.

But leukæmia is found under other conditions than those just mentioned. The observations of Virchow, J. Vogel, Uhle, De Pury, Böttcher, and Frerichs, have rendered it highly probable that it is not unfrequently developed as a result of true hypertrophy of the liver—that form of hypertrophy which is characterised by an increased size, or an increased number, of the secreting cells, and which has been already described in the British Medical Journal for March 16th (p. 285). It is now well known that the liver is subservient to other purposes, besides the mere secretion of bile, and that it plays an important part in blood-formation. The precise nature of the changes which the liver effects in the blood is still a subject for investigation, as is likewise the manner in which the liver can produce an increased number of the white corpuscles in the blood. It may, however, be mentioned that, in certain cases of leukæmia, Frerichs and others have discovered numerous little bodies scattered through the liver, which have been designated "lymphatic new formations." These bodies are rounded nodules, of about the size of millet-seeds, of a greyish-white colour, and not unlike tubercles. They are made up of densely aggregated nuclei, and of small, slightly granular, rounded cells, between which, especially at the periphery of the mass, a delicate fibrous tissue may be observed. These nodules are connected with small blood-vessels, in the walls of which they are developed, and the channel of which is thereby narrowed and occasionally blocked up. Smaller new formations of the same nature may likewise be found between the hepatic cells, where they are developed in the connective tissue and compress the cells, assuming at one time a rounded, and at another an elongated form. Small deposits of the same nature, scarcely visible to the naked eye, have been observed by Friedrich and Wagner in typhoid fever, where the spleen and Peyer's glands are also enlarged, and where, according to Virchow, there is likewise an increased number of white corpuscles in the blood. (*Gaz. des Hôp.*, 5 Mars, 1861; *Frerichs' Klinik der Leberkrankheiten*, vol. ii; *Virchow, Cellular-Pathologie.*)

FUNCTIONS OF THE SPLEEN. The functions of the spleen have recently been the subject of fresh observations and experiments by Professor Maggiorani of Rome, who has arrived at the conclusion that the organ is subservient to a two-fold purpose; namely, that, in the first place, it contributes directly to the formation of the red matter of the blood; and, secondly, that it has the power of converting sugar into fat, all that is necessary for effecting this change consisting in the removal of a certain proportion of oxygen. (*Gaz. Méd. de Paris*, Mars 2, p. 138.)

CEREBRAL CIRCULATION IN ASPHYXIA. Professor Ackermann of Rostock has lately arrived at some remarkable results, from experiments made with the object of ascertaining the condition of the cerebral circulation in asphyxia. These experiments consisted in removing a portion of the skull of an animal, by means of a small trephine, and substituting a piece of glass. After an interval of about twenty-four hours, asphyxia was induced by strangulation, by submersion, by compression of the thorax, by injection of water into the trachea, or by some other plan. The condition of the brain was then watched through the glass plate.

The result of these experiments is, that asphyxia was invariably found to be accompanied by a condition of anæmia, instead of congestion, as is generally believed to be the case. The anæmia was always greatest, when the animal was asphyxiated in such a position that its head was higher than the trunk, and least when the animal was suspended by its lower extremities. In the former case, it was as pronounced as that which is observed when an animal has bled to death from the carotids. The congestion of the cerebral vessels, which is not unfrequently met with after death from asphyxia, Professor Ackermann believes to be attributable to hypostatic hyperæmia of a *post mortem* character, favoured by the fluid condition of the blood, which is usually observed in asphyxia. (*Archives f. Path. Anat.*, tom. xv, s. 401).

DIABETES RESULTING FROM DISEASE OF THE FLOOR OF THE FOURTH VENTRICLE. Two cases of diabetes are recorded in the *Gaz. des Hôp.* for March 2, 1861, where softening was found after death in the anterior wall of the fourth ventricle. The part of the brain which was diseased corresponded to the place of origin of the pneumogastric nerve; and hence such cases, of which there are now a considerable number on record, tend to confirm the views of Professor Bernard as to the influence of the par vagum over the formation of sugar. (*Gaz. des Hôp.*, Mars 2, 1861).

NEW REMEDY FOR RHEUMATISM. Dr. Awenarius of St. Petersburgh advocates the use of *Propylamine* in the treatment of acute and chronic rheumatism. During the two years 1855 and 1856, he treated 250 cases of rheumatism with this remedy, and affirms that the pain and fever always disappeared the day after the commencement of the treatment. The composition of propylamine is C^6H^9N, which corresponds to one equivalent of propyline C^6H^6, and one of ammonia NH^3. The substance is a transparent, colourless, volatile fluid, of a penetrating odour, reminding one of fish bones and ammonia. It is obtained by distilling the juice of herrings with an excess of potash. The product of distillation is then saturated with hydrochloric acid and evaporated to dryness. The hydrochlorate of propylamine which is now formed is extracted by means of alcohol, and the hydrochloric acid separated by the addition of lime. The dose is about half a drachm. (*L'Union Méd.*, Mars 2, 1861, p. 430).

ARSENIC IN THE TREATMENT OF AGUE. A commission appointed to investigate the efficacy of arsenic in the treatment of intermittent fever, has reported to the *Societé Médicale des Hôpitaux*, that the remedy in question is, if properly administered, a most powerful febrifuge, and that it has unquestionably the property of reducing engorgements of the spleen. The results arrived at are well worthy of the serious attention of those of our medical brethren engaged in public service in the tropics; for if they be correct, the present enormous expenditure for quinine in our army and navy might be very much reduced. An abstract of the report of the commission will be found in *L'Union Médicale* for March 9th, 1861.

ACETATE OF LEAD FOR PNEUMONIA. Professor Strohl of Strasbourg extols the use of acetate of lead in cases of pneumonia, as much preferable to antimony or any of the more ordinary plans of treatment. He prescribes the acetate of lead in repeated doses of from three to seven and a half grains. At the commencement, if the patient be plethoric, he orders a bleeding from the arms, but in most cases he is satisfied with cupping or leeches. As soon as the symptoms begin to improve, the lead is omitted, and resolution is left to nature, the patient's strength being, at the same time, supported by nourishing diet. (*Gaz. des Hôp.*, Fév. 28, 1861.)

ELECTRICITY IN OBSTINATE CONSTIPATION. Dr. Clemens of Frankfort-upon-Maine recommends the employment of electricity in cases of ordinary constipation, independent of any organic lesion. He applies the positive pole over the ileo-cæcal valve, and the negative over the middle of the descending colon. At the first sitting, five or six electric discharges are administered, and on each occasion the power and duration of the current are increased. (*Deutsche Klinik.*)

TREATMENT OF FAVUS. The following is the treatment of favus practised by Professor Hebra of Vienna. The crusts are first completely impregnated and softened with cod-liver oil, and in this state are detached with a wooden spatula. After this, the head is washed with soap, and cold wet cloths are constantly applied, while the diseased hairs, which are easily recognised from their opaque, non-glistening character, from being brittle, and from appearing to the naked eye covered with fine dust (an appearance which, under the microscope, is found to be due to the presence of minute fungi), are carefully extracted as fast as they show themselves. (*Spitals Zeitung*, No. 5, 1861.)

NEW TREATMENT FOR SCABIES. Dr. Metzel of Cracow has been very successful in the treatment of scabies with oil of phosphorus. The oil is prepared by introducing two drachms of phosphorus into about sixteen fluid-ounces of olive oil, and subjecting it to a temperature of 212° Fahr. in a vapour-bath. The oil is to be rubbed in over the diseased skin. Dr. Metzel reports eighty cases, in all of which a complete cure resulted, without any relapse. In the majority of the cases, three or four frictions sufficed to effect the cure. (*Bullet. Gén. de Thérapeutique*, Fev. 28, 1861.)

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, APRIL 8TH, 1861.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

ON THE CLIMATOLOGY, TOPOGRAPHY, AND DISEASES OF HONG KONG AND THE CANTON STATION. BY W. R. E. SMART, M.D. PART I. CLIMATOLOGY AND TOPOGRAPHY.

[*Read by* DR. M'WILLIAM.]

DR. SMART commenced by stating that he was desirous to place before the Society the results of his observation during a service in the Royal Naval Hospital, Hong Kong, from May 1857 to July 1859.

Considering, further, that the medical records of an establishment, dating from the early days of that colony, would repay a thorough inquiry, by elucidating many obscurities and clearing away errors from our etiology, he undertook an investigation; but he was unable to render it as complete as he had purposed, owing to his recall to England on promotion. The investigation was retrospective, from June 1859 as far back as June 1846, or nearly to the period of Dr. John Wilson's *Medical Notes on China*, which were founded on his experience in the same hospital.

The meteorological deductions were made by Dr. Smart from the monthly records from 1853 to 1858, kept in the Royal Engineers' Office; access to which was courteously accorded to him by Colonel Mann, of that scientific corps. A similar series of observations was also made in the hospital ship by Dr. Smart, in conjunction with Mr. Henry Fegan, assistant-surgeon—a most diligent and accurate observer. This was, however, interrupted by Dr. Smart's departure just as it began to be of great interest, as showing the difference of temperature and of air-currents in the broad harbour and in the town, situate at the base of a high peaked hill, and showing the advantage of a floating over a shore hospital on that station.

Atmospherical Pressure. Elevation of the mercurial column takes place during the cool dry season of the north-east monsoon; and a corresponding depression occurs in the hot, moist, and electrical season of the south monsoon. The highest monthly average is that of January, from which there is a gradual descent, accelerated in April, until the lowest degree of pressure is reached in August, about the middle of the south monsoon, when the mercury again rises rapidly and uniformly. Thus the maximum and minimum of atmospheric pressure correspond with the height of each monsoon, and not with the variable tempestuous seasons of the changes, the pressure being about medium when these changes occur. The diurnal atmospheric wave is double; the major being at its highest from 9 to 10 A.M., and the minor from about 10 P.M. to midnight; the lowest readings between the waves being about 4 A.M. and 4 P.M.

Atmospherical Temperature. The mean annual temperature exceeding 73° Fahr. defines the meteorological position of Hong Kong as within the limits of the first isothermal or tropical zone, corresponding with its geographical position in 22° 16″ 10″ N. latitude. Lying thus close on the tropic of Cancer, it has not the double succession of seasons that characterise positions nearer the equator. Its summer and winter seasons are well contrasted, for its geographical position; but, owing to the prevailing winds of summer, the temperature does not at that season rise so high as at Shanghai, in latitude 31.10° N., where the thermometric range is greater. At Hong Kong, in the six years period of the tables appended to the paper, the highest temperature noted was 94.5° Fahr., and the lowest 39°, showing a range of 55.5°. The means of the highest and lowest notations of six successive years give a mean range of 46.5°. The mean mensual range of the coldest month (January) and the hottest (July) is 33.5°, which is much in excess of that of the same latitude in India. This climatic feature is appreciated by the residents, as highly invigorative of the system, relaxed and debilitated by the moist heat of the summer months; and doubtless it is so, to all who avoid exposure and excess. From November to April inclusive, the mean temperature scarcely exceeds 70°, and falls but little below 60° (January and February being the coldest months). From the middle of May, the mean temperature rises much; and from June to September inclusive, it exceeds 80°. July is the hottest month; its mean temperature in six years having been 86.25°, and the lowest mean 80.6°.

The seasons may be divided as follows: the cool and dry, January, February, and March; the heating and damp, April and May; the hot and wet, June, July, August, and September; the cooling, October, November, and December.

Regarded simply as a meteorological fact, the range of temperature in this climate may seem of minor importance; but it is far from being so in a sanitary point of view. When a high temperature exists, vital force is less able to endure sudden chills than in the temperate and arctic zones. Our soldiers and sailors often cannot avoid exposure on duty; and the obvious indication in such circumstances is, that they should be provided with warm clothing, and fortified with the stimulus of warm food and drinks, *during the night and towards dawn.* By routine, we crowd the aliment of our men into a few hours before and after midday, by which the system is left without support when most urgently demanded to ward off the depressing influence of climate.

The temperature of the sun's rays, observed Dr. Smart, is an important agent in the causation of tropical diseases. So far as the observations in the tables go, they show the lowest mean of 91° in March, ascending to 120°, the maximum mean in August; and then descending to a medium stage of 105°, persistent in November, December, and January; after which a second descent goes on, till the minimum is attained in March. The mean of the sun's heat is low, owing to the cloudiness of the sky at that season; and the high mean of November, December, and January is dependent upon the opposite condition during these months.

Rain-fall. The mean annual fall of 93.18 inches in 111 days is quite enough to characterise the climate as a wet one, even if it were distributed equally through the twelve months. By far the greatest amount, and all the heavy falls, are during the strength of the south monsoon, from June to September inclusive; but more than an average quantity falls also during the variable winds at the change of the monsoon. In the north monsoon, from November to March inclusive, there is only a small precipitation in gentle showers; and it may then happen that scarcely any rain falls for months together, contrasting strongly with the summer months, when it often pours in torrents, which destroy houses, bridges, and roads.

In discussing the influence of the rainy season upon health, Dr. Smart remarked, that the malarious agencies of the Canton River are very generally attributed to the extensive rice cultivation, known as the "Paddy Fields", extending mile after mile, in swamps, for many months of the year; as the rice crop, to be successful, requires much irrigation. The land produces two crops of this cereal annually; the seed-times being in March and late in July, and the harvests falling early in July and early in November, each crop requiring about three clear months. Very careful tillage is observed. The soil is ploughed and harrowed when inundated, and then drained to receive the young plants from the nursery beds. The soil is kept always sodden, and sometimes inundated, until the plant shows signs of ripening, when it undergoes a thorough drainage for the harvest, and remains dry until the ploughing for the next crop has to be done. In this course of tillage, the rice-grounds are swamps from the middle of March to the middle of June, and again from the middle of July till the middle of October. They are drained for the ripening of crops at the middle of June, and again at the middle of October, remaining dry from that time to February inclusive.

The statistical table of diseases appended to the paper corroborated the view that the seasons of greatest frequency and fatality of the climatic diseases coincide with those when the rice-fields are undergoing the process of drying; and that the months of April and September, when the inundation of the fields is continuous, are healthy months.

These facts seem to confirm the theory that morbific paludal miasmata are evolved from a drying, and not from a wet surface.

Winds. The distinctive phenomena of this climate are derived almost entirely from the great atmospherical currents termed "monsoons".

The geographical position of Hong Kong is within the normal belt of the north-east trade, which would blow there all the year round, if there were no disturbing cause; and it is still the dry winter wind, called "the north-east monsoon". In the summer, the south-east trade wind crosses the equator, and strikes on the southern coasts of China, in its course towards the heated plains of Central Asia, and is then named "the south-east monsoon".

Short-sighted creatures that we are, continued Dr. Smart, that while the humid atmosphere of the summer oppresses us, we sigh for the cool dry air of the northerly monsoon, and almost allow ourselves to indulge the wish that the law of Nature regarding the trade winds had had no exception here. But we do this without thinking of the terrible climatic change that would result if the dry north wind blew even for one summer, like a simoom, across the plains of China.

Dr. Smart then entered into the climatology and topography of Victoria, Hong Kong, Macao, and Canton, respectively; especially of the first, the causes of the insalubrity of which he described at considerable length. He remarked, before concluding his paper, that intelligence had reached him at Bermuda of the cession by the Chinese of the Cowloon peninsula, facing the town of Victoria to the north and east. The shores of Cowloon, he added, present curved lines, forming sandy beaches, separated by the granitic spurs that fall from the mountain ridge situated about five miles inland. Dr. Smart considered that, in a sanitary point of view, this possession promises to be of great value, as the gentle rise of the land in hill and valley offers an ample site for town-extension, in addition to the requirements of what will become a first-class arsenal. Commercially, an incalculable advantage will arise from the fact of the town being on the side of the harbour, to which the merchant shipping are compelled to resort during the dangerous season of typhoons, to obtain the shelter of the promontory.

The second division of the paper, which treats of the diseases of Hong Kong, etc., will be read at the next meeting of the Society.

Mr. Radcliffe said, that no one could but admire the amount of painstaking labour and ability which Dr. Smart had devoted to this most important paper. He had entered into the meteorological questions so minutely that it was almost impossible to follow up the matters discussed, on hearing the paper read for the first time. He considered that Dr. Smart would have elucidated the subject better, and made it more intelligible at a meeting like this, if he had projected curves of temperature, barometric pressure, etc., instead of giving tables of these phenomena.

Dr. Milroy considered that every word coming from Dr. Smart was valuable, and that the present paper well sustained his reputation. There were some important practical suggestions among the large amount of scientific matter which Dr. Smart had brought before the Society. He referred more particularly to Dr. Smart's opinion with reference to the liability of soldiers and sailors to disease at night, when they are so long left without food, and not unfrequently inadequately protected by covering and clothing. He was of opinion that much remained to be done in the army and navy with reference to the proper berthing, clothing, and providing support for the men during the night. The great period for the invasion of cholera and other epidemics was between ten at night and six in the morning.

The Director-General of the Medical Department of the Army had much satisfaction in stating that Dr. Smart's suggestion to provide a warm meal for the soldiers at night was already in use in the army, and had been adopted with marked benefit among the troops in China. Those troops had been well fed and clothed, and in every way well cared for. He exhibited the following statistics of the British army in China during the late campaign from May 1st to November 11th, 1860.

	Europeans.	Natives of India.
Number	9069	4920
Deaths	224	79
Mean sick................	418	156
Ratio of constantly sick per 1000	46.09	31.71
Annual ratio of deaths per 1000 of strength	45.3	29.45
Ditto, exclusive of killed in action or dead of wounds	38.43	29.76

Dr. Gallagher, R.N., observed that a warm meal at night had been common in many ships in the navy, without reference to the Admiralty or other superior authority beyond the captain of the ship. In the ship to which he belonged in the Baltic, during the war with Russia, the night-watches were allowed a certain period to smoke and have a basin of coffee. The same practice was in use in other ships, and with great benefit to the crews. He trusted that a recommendation from this Society would induce the Admiralty to render it compulsory in our navy to issue a night-meal to those on duty, as was the case in the French navy.

Dr. Duigan, R.N., said his experience led him to support warmly the recommendation to give a warm meal at night to men on watch, as that was the period in which they most needed protection against the invasion of disease, more especially of epidemic diseases, such as cholera.

Dr. McWilliam said he had known in his life few men in the public service who had equal will and power to investigate not only disease, but also the meteorological and other influences producing disease, with Dr. Smart. From the elaborate character of the inquiry in the first division of the paper, which had been read tonight, it was next to impossible to do it justice in discussion upon a single reading. Such a paper required careful study before its merits could be reached. The meteorological deductions could only have been drawn up after diligent and laborious investigation, and, be it remembered, in a climate the reverse of favourable to mental exertion. The manner in which the whole question of the climatology and topography of that part of China had been treated was most creditable to the service, as well as to the author of the paper. Dr. Smart would, he felt assured, be the first to act upon the suggestion of Mr. Radcliffe in respect to the projection of curves elucidatory of the temperature, barometric pressure, etc., at present recorded in the tabular form.

ON A RARE TRACT ON PLAGUE, ETC.

BY J. N. RADCLIFFE, ESQ.

Mr. Radcliffe directed the attention of the Society to a very rare and curious tract on plague recently printed by the Bannatyne Club, "page for page, from the only known copy preserved in the Advocates' Library". The author of the tract was Dr. Gilbert Skeyne. He was a descendant of an ancient Scottish family, and was educated at the Grammar School and King's College, Aberdeen. He graduated as a Master of Arts, and subsequently applied himself to the study of medicine, and took a doctor's degree. In 1556, he was appointed "Medicinar", or Professor of Medicine, in King's College; and, while holding this position, he wrote the tract on Plague now reprinted. In 1575 he removed to Edinburgh, and in 1581 he was appointed a physician to King James VI.

The tract was first published in 1568. It contains a popular exposition of the causes, symptoms, and preventive medicine of plague, in the vulgar tongue, and is highly interesting, not only on this account, but also from its presenting a summary of the opinions which may be supposed to have been entertained on plague by Scottish physicians about the middle of the sixteenth century.

Mr. Radcliffe also read a very curious and interesting letter, bearing date August 27th, 1564, from the English ambassador in Spain to Queen Elizabeth, and which contained an account of the medical treatment of the second wife of King Philip while suffering from "fever". The letter has only recently been brought to light by Mr. Froude, during his researches in the State Paper Office; and Mr. Radcliffe was indebted to Mr. Turnbull, late Calendarer of State Papers, for a copy, which will be found in full in the April number of the *Medical Critic*. This letter also makes known an historical fact which, it is believed, has not previously been noted; to wit, that in the event of Her Majesty of Spain dying, Philip designed to have married Mary Queen of Scots.

Correspondence.

THE MEDICAL ACT AND MILITIA SURGEONS.

[The following correspondence has been forwarded to us for publication.]

Medical Registration Office, 32, Soho Square, London,
April 10th, 1861.

Sir,—As I have been informed that you hold an appointment in the medical department of the militia, I take the liberty of calling your attention to the thirty-sixth section of the Medical Act (1858), by which it is enacted that "no person shall hold an appointment as a physician, surgeon, or other medical officer, either in the military or naval service, unless he be registered under this Act".

I have the honour to be, sir, your obedient servant,
Francis Hawkins, *Registrar.*

G. H. Thurston, Esq.

Guernsey, April 13th, 1861.

Sir,—In reply to a circular which you did me the honour to address to me on the 10th instant, I have to state that, by virtue of my diploma as a member of the Royal College of Surgeons of England, I have obtained lawful permission to practise in Guernsey, and I am consequently entitled to hold a commission as a medical officer in the Insular Militia.

Nevertheless, on the 18th of April, 1860, I deemed myself bound to tender the resignation of that commission, in consequence of the appointment of a homœopath as staff-surgeon in the militia—an appointment whereby the whole of the regimental medical officers were summarily superseded. They, as well as the staff-surgeons, felt it incumbent on them to request permission to resign their commissions. The resignations of the regimental surgeons and assistant surgeons have not been accepted; but the staff-officers—men of such standing as Drs. Hoskins, De Lisle, and Monsell—were allowed to resign, in order to be replaced by a homœopath.

For my own part, so long as a homœopath holds a commission as a medical officer in the militia, I am desirous that the resignation of my commission should be accepted; and to this end I, as well as my brother-officers, have more than once memorialised the Right Hon. the Home Secretary, but without obtaining redress.

I am quite ready to do duty in the ranks as a private soldier, rather than be liable to cooperation with a homœopath; the former alternative being more consonant with what is due to our profession than the latter, and personally less onerous, considering that the services of a medical officer in the Guernsey Royal Militia are gratuitous.

I have the honour to be, sir, your obedient servant,
Geo. H. Thurston.

Dr. Francis Hawkins, Medical Registrar, 32, Soho Square.

[The gentleman who forwards us the above correspondence for publication observes that "the Registrar, as it appears, has full power to persecute the legitimate practitioner, but none whatever to protect him". Editor.]

RIGHTS OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

Sir,—The President and Council of the King and Queen's College of Physicians, Ireland, have claimed the right of conferring upon their Fellows and Licentiates the title of "Doctor of Physic," and upon an expression of the Attorney-General for Ireland have published the following:—

"The charter of William and Mary, and the act of the Irish Parliament 1 Geo. III, cap. 14, made perpetual by the Act of 30 Geo. III, cap. 45, s. 11, confer on the Fellows and *Licentiates* of the King and Queen's College of Physicians the title of Doctor of Physic."

Such is the assertion put forth by the governing body of this College, without one clause from the charter being given to bear it out. Much discussion has taken place upon this—to a *College*—unique privilege; placing it, in point of powers, nearly equal to an University.

Many able letters have appeared in your valuable periodical on this subject, but none, until your notice of the decision of the General Medical Council, founded on the able opinion of Sir Hugh Cairns and Mr. Hobhouse, have touched upon the real point, *i.e.*, whether the College had legally the power they claimed. The opinion of these eminent lawyers is that the King and Queen's College of Physicians, Ireland, do not possess any such power as that claimed.

It is true that 30 Geo. III, cap. 45, sec. 11, makes perpetual the 1 Geo. III, cap. 14; but neither that act nor the charter confers on the *Licentiates* the title of Doctor of Physic. Nor do they even confer it upon the Fellows, although by the more recent act of 40 Geo. III., cap. 84, the Fellows (unless when reduced to six) *must* have taken a degree in arts or medicines, in one of the Universities of Oxford, Cambridge, or Dublin, before they can be elected as Fellows, and thus when they possess the degree of M.D. or M.B., it is not *conferred* by the College as pretended, but by the University to which they have previously belonged.

Many letters have been written upon this subject; but no one of them has stated the constitution of the College, or what it was intended to do, as contrasted with what it has done. I will, therefore, with your permission, state briefly as I can its creation and powers so far as they are applicable to the point in discussion, and request anybody who feels interested not to rely upon my statements, but to test their accuracy.

1. The charter (dated 15th Dec., 1692, and enrolled in the Irish Chancery*) in its preamble alleges that "The number of unskilful and illiterate practitioners had increased, and the frauds and deceits of empirics, apothecaries, and druggists, abounded to the dishonour of government, and the prejudice and destruction of the subject," and it then proceeds to incorporate seven physicians by name, whom it states to be *Protestants*, and seven others to be nominated by them, by the title of "The President and Fellows of the College of Physicians in Dublin," and gives them power "to make bye-laws for the government of the said President and Fellows, and also *of all other practisers of physic* and others, the persons aforenamed for the reformation and redress of the abuses, deceits, etc., herein mentioned;" with powers to punish offences against them, "yet so as always the said laws be not repugnant to the laws of the kingdom of Ireland." It then declares "that no person being no member of the said corporation, nor licensed under their common seal, shall thenceforth use or exercise the faculty of physic within Dublin, or seven miles in circuit thereof," without being licensed to do the same by the President and Fellows of the said College, under specified penalties. And it gives power to the College at all times "to supervise, examine, survey, correct, and punish all and singular *physicians* and practisers in the said faculty of physic, *apothecaries*, *druggists*, etc., within Dublin, or seven miles of the same.

It next gives powers to summon before the President and Censors of the College, "all and every *physician and physicians*, practisers of and practisers in the said faculty of physic," within Dublin or seven miles therefrom, "and to examine them concerning their skill and practice in the said faculty of physic," with punishment by fine for refusal to be examined, and makes other regulations of the same kind as to druggists, etc , and as to practitioners in Ireland beyond seven miles from Dublin, and for giving testimonials to midwives.

The object of the charter, therefore, was to create a corporate body which should examine into, regulate, and correct the practice and sale of physic *and nothing more*. And whoever will carefully read it will find marked distinctions made in it between different classes, *i.e.*, 1st. Between members of the corporation *admitted into it*, who were to be *graduates*; and Licentiates of the corporation who were *licensed by it*; but were *not* required to be graduates who could not (nor to this day can they) as Licentiates be admitted into its body. And, secondly, between Licentiates, *under the seal* of the College, who alone were to practice in Dublin, and within a circuit of seven miles round about it; and Licentiates under the hands of two examiners, members of the College, who were authorised to practise in Ireland, only beyond that circuit, but not within it.

2. With respect to the Acts of Parliament, on careful perusal, it will be found that, though they regulate the number and qualifications of the Fellows and Professors and their salaries, and appoint Visitors of the College, yet they give it *no power* to confer degrees; so that the result clearly deducible is that the College was not *intended* to have, and have not lawfully, the power of *creating* physicians or apothecaries, but merely of ascertaining that persons practising in these capacities *in Ireland, and not elsewhere*, were sufficiently skilled in their profession to prevent injury to the public health. This is further shewn by the form of their licence, which merely expresses "To grant, so far as rests with them, full licence to exercise the art of medical science so long as he (the Licentiate) shall well conduct himself" (not saying whether as physician or apothecary, because originally framed so as to be applicable to both).

How the King and Queen's College of Physicians, Ireland, could have successfully assumed the power of creating physicians seems to require a passing notice. The inducement to do so was, doubtless, to obtain higher fees. Forty years ago, the fee paid by Licentiates was £50; but of late years it is only £30. In order to compel their Licentiate to practise as a physician, the process of the College is to exact declarations from the candidate for the licence that, on pain of forfeiting his licence, he will practise as a physician only. These would be unavailing were it not for another rule of the College, namely, that after examination and approval the candidate shall surrender to the College his licence in *any* apothecaries' company of which he is a member. Such is the process still used by the King and Queen's College for making a hybrid medical practitioner, who, by courtesy, is to be called "Doctor." It is not to be wondered at, that a College, politically constituted as has here been shown, and entitled to inquire into the qualifications of all practitioners of physic in Ireland, should, in the last century and in that country, be supposed to be legally capable of *creating* a physician, nor that its real powers should have been exceeded; but it is very surprising that its license should have passed current in England as equivalent to the diploma of a physician; and its acceptance here to any extent can only be accounted for by the very lax state of the medical profession prior to the late act.

It is not intended to throw any discredit upon the present Licentiates of the College, who must be regarded as persons misled by representations commonly received and acted on, which they could not fairly be expected to investigate before paying their money for a supposed medical *status*. On the contrary, they ought to be liberally dealt with, and freed from the trammels which have been imposed upon them; for it is quite certain that the licence of the King and Queen's College of Physicians gives no medical *status* whatever in England.

The committee of the Medical Council have, therefore, acted quite fairly in repudiating these licenses as in no way conferring the title of Doctor of Physic or M.D. It is quite time that the question of titles should be settled, as it is of vital importance to the medical profession that in future no pretended or unauthorised degree should be recognised by it. The King and Queen's College should apply for a new charter, which they have power to do under sect. 51 of the Medical Act, and by so doing raise their Licentiates to a level with the Licentiates of the Colleges of Physicians of London and of Edinburgh.

I am, etc.,

Delta.

SUPPORT OF THE PERINÆUM.

Sir,—Is there so much necessity for discussion respecting interference or non-interference with the perinæum during labour?

If anyone will take a very thin elastic tissue, and stretching it tightly across his parted knees, roll over it a rounded body, he will find a tearing of the free edge very easy. Let him now place a pad or support of any kind under the extended material, and again pass over it the same body, laceration will be found much more difficult. Support at all is, in many cases, I am persuaded, unnecessary; and if applied too soon is hurtful, and the cause of laceration; but when moderately used (*arte non vi*) and in the last few pains when distension appears excessive, I am clearly of opinion it is a valuable precaution from accident, and a great source of comfort to the patients.

I am, etc., C. H.

April 15th, 1861.

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* The College possessed an earlier Charter, granted by Charles II, A.D. 1667; but this was surrendered when that of 1692 was granted.

Medical News.

Royal College of Surgeons of England. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on April 12th. [With an asterisk, have also passed the preliminary examination for the Fellowship of the College.]

Brown, Frederick Warren, Uppingham, Rutland
Capper, Jasper, Liverpool
Cumming, Stuart McDonald, Bilston
Date, William, Cirencester
Edwards, Walter, Bampton, Devon
Evans, David Norman, Denbigh
George, Frederick, Morton Place, Pimlico
Gilbert, Edward Gillett, Bilston, Staffordshire
Gregory, John, Manchester
Inman, William, Ledberg, Yorkshire
Jackson, James, Hobart Town, Tasmania
Machin, Edmund Spooner, Erdington, near Birmingham
Spyers, Thomas Charles, Weybridge
Strutt, George Henry, Burton-on-Trent
Sutton, Frederick John, Martin, Lincolnshire
Wilson, Henry Octavius, Bristol
Woodman, William Bathurst, Stonehouse, Gloucester
Wright, Alfred, Mount Sorrel, Leicestershire
Wynter, Daniel Robert, Kensington

The following gentlemen were admitted on April 16:—

Armstrong, Samuel, Woodbridge, Suffolk
Baker, William Morrant, Andover
Bendall, James, Trowbridge, Wilts
Brotherton, William Henry, Tottenham
Byles, Alexander, London
Clarke, Arthur, Cold Norton Hall, Malden, Essex
Evans, Thomas Melancthon, St. Neots
Garnham, Devereux John, Lowestoft
Grabham, Michael Compost, Rochford, Essex
Harrington, James Douglas, B.A.Oxon.
Kilburn, John Edward, West Auckland, Durham
Lanchester, Henry Thomas, Norwich
Lloyd, Edward Sidney, Broxbourne, Herts
Moore, Daniel, L.S.A., Hastings
Richards, Caleb Carey, Caerphilly, South Wales
Robinson, Haynes Sparrow, Cambridge
Scott, Nathaniel Gilbert, Wappenham, Northamptonshire
Smith, Edward, Bedford
Smith, Henry, Brighton
Tibbits, Edward Thomas, Bayswater
William, John, M.D. St. Andrews, Pwllheli, Carnarvon

The following gentlemen were admitted on April 17:—

Beck, William Reginald, Keighley, Yorkshire
Belcher, Joseph Silverthorne, London
Benny, Michael, Denny, Stirlingshire
Bevan, Thomas Kemnel, Carmarthen
Bird, William, Tarporleys, Cheshire
Brown, Arthur Boyer, Notting Hill
Collins, Henry, Wincanton, Somerset
Earle, James Lumley, Nether Stowey, Somerset
Griffith, George, Pointz Castle, Pembroke
Hatchett, Joseph, Birmingham
Hooper, John Harward, Upton Warren, Worcester
Humphreys, Matthew Hale, Markham Square, Chelsea
Hutchinson, John Hanley, Catterick, Yorkshire
Ling, William Squire, Gorleston, Suffolk
Owen, Owen, Anglesea
Owen, Richard Jones, Leamington
Sheppee, William Henry, Bedford
*Smith, Thomas Starkey, Warrington
Spencer, William Henry, Preston, Lancashire
Waylen, Charles William, Haverstock Hill

The following gentlemen were admitted on April 18:—

Ballard, Charles, Maidstone
Batten, William Smith, Shaftesbury
Bowes, William, Elham, Canterbury
Brünjes, Martin, Bow
Cartwright, John Edward, Margaret Terrace, Chelsea
Eddowes, Charles, Cambridge Street, Pimlico
Furse, Edwin, South Molton, Devon
Green, Edward, Brixham, Devon
Hope, William, Halifax, Yorkshire
Morgan, Herbert Major, Lichfield
Mortimer, William, Trewellwell, Pembrokeshire
Neatby, Thomas, Barnsley
Ninnis, Belgrave, Surrey Square, Old Kent Road
Newby, Thomas, Grimsby, Lincolnshire
Richardson, Timothy, Commercial Road East
Rowland, Henry Orford, Ipswich
Swales, Peter, Sheerness

The following gentlemen were admitted on April 20:—

Anderson, Henry Bunting, East India Road, Poplar
Barham, Herbert Frederic Henry, Maidstone, Kent
Bazeley, William, Plymouth
Blackett, George Price, Durham
Brook, Charles, Lincoln
Fielden, Samuel, Bishop Auckland, Durham
Green, Thomas Foulds Horsfall, Burnley, Lancashire
Haslewood, John Austin, Darlington
Hodges, Britton, Walton, Herts
Hodson, John Clayton, London
Hurlstone, Michael Oscar, Cheltenham
Lyons, William, Madras
Milburne, Thomas Dodd, Ryton, Newcastle
Morgans, John, Cross Hill, Nebo, Aberystwith
Overton, Arthur, Coventry
Phillips, George Bagster, Clapham
Schofield, Frank, Saddleworth, Manchester
Southey, Albert James, Frognal, Hampstead
Waller, Charles Beaumont, Finsbury Square
Williams, William Griffith, Haverfordwest
Williams, Samuel White Duckworth, Gloucester
Yeo, Isaac Burney, Stonehouse, Devon

APPOINTMENTS.

Savory, William S., Esq., F.R.S., elected Assistant-Surgeon to St. Bartholomew's Hospital.

Royal Navy. The following appointments have been made:—

Dann, Edward, Esq., Acting Assistant-Surgeon, to the *Procris*.
Farr. George E., Esq., Acting Assist.-Surgeon, to the *Magicienne*.
Grigg, Joseph C., Esq., Assistant-Surgeon, confirmed in *Hydra*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Bickersteth, E. R., Esq., to be Assist.-Surg. 25th Lancashire R.V.
Essery, T. A., Esq., to be Surgeon 4th Glamorganshire R.V.
Freeman, S., Esq., to be Surgeon 1st Administrative Battalion Suffolk R.V.
Traill, J., Esq., to be Assistant-Surgeon 3rd Forfarshire R.V.

To be Honorary Assistant-Surgeons:—

Ingman, J., Esq., 2nd Company Denbighshire R.V.
Jones, G. T., M.D., 3rd Company Denbighshire R.V.
Jones, T. E., Esq., 1st Company Denbighshire R.V.
Leete, E. S., Esq., 73rd Lancashire R.V.
Leslie, J., Esq., 19th Aberdeenshire R.V.
Meek, W. S., Esq., 2nd Shropshire R.V.

BIRTH.

Abbott. On March 11th, at St. George's, Bermuda, the wife of C. T. Abbott, M.D., 39th Regiment, of a son.

DEATHS.

Baldrick, James, M.D., at Massmont, Ireland, on April 6.
Bell, Robert, M.D., at Dundee, on April 16.
Bernard, John C., M.D., at Mornington Crescent, on April 15.
Chapman. On April 19th, at 2, Bentinck Street, Maria, daughter of the late John Chapman, M.D., of Demerara.
Edwards. On April 16th, at 28, Gloucester Crescent North, aged 11 months, Emily I. P., daughter of *Thomas E. Edwards, Esq.
Faught. On January 21, at Jullundar, Bengal, the wife of J. G. Faught, Esq., Assistant-Surgeon 46th Regiment.
Harbison, William, Esq., Surgeon, at Rathfriland, Ireland, on April 4.
Harris, Thomas, M.D., Senior Surgeon of the United States Navy, at Philadelphia, aged 78, on March 4.
Love, George Heginbotham, M.D., at New Wanstead, aged 33, on April 21.
Nihill, P., M.D., at Killaloe, on April 6.
Southey. On April 19, at 1, Harley Street, aged 41, Major Charles G. Southey, 3rd Madras European Regiment, eldest son of H. H. Southey, M.D.
Tait, Greville E., Esq., Surgeon, at Highbury, on April 12.
Wootton. On April 20th, at Harrold, Bedfordshire, aged 58, Letitia Patten, wife of William Wootton, Esq., Surgeon.

The Royal College of Physicians and the Apothecaries' Society. On the 30th inst., the information filed against the College of Physicians of London, by the Apothecaries' Society, will be heard before Sir Page Wood, Rolls Court, Chancery Lane.

Testimonial to Dr. Meigs. The faculty, trustees, and students of the Jefferson Medical College, Philadelphia, have presented Dr. C. D. Meigs with a handsome portrait of himself, on the occasion of his retirement from the professorship of midwifery.

Lunacy Regulation Bill. The Lord Chancellor has moved the insertion of words requiring the Lord Chancellor to see the lunatic before deciding whether he should give his consent or not to a new trial.

Dwellings for the Working Classes. In the House of Commons, on Friday (yesterday week), Mr. Slaney obtained leave to introduce a bill to facilitate the grant or sale of small portions of entailed lands near great towns, as sites of dwellings for the working classes, and for other purposes of a like beneficial and charitable nature. He explained that owing to the dwellings of the poor being removed for the purpose of making improvements in towns, the working classes were driven to localities already overcrowded. He therefore proposed to obtain a bill which would enable them to get sites of land near towns where suitable dwellings for the poor might be erected; they would thereby improve their moral and social position.

Army Medical Affairs. In the debate on the Army Estimates on Thursday week, Sir F. Smith asked whether the invaliding establishment and medical school were to be removed from Chatham to Netley.—Colonel Dickson thought that the sum of £400,000, to be expended on Netley Hospital was an excessive outlay. He found that in the charge for hospital diet this year there was an increase of £45,000 over the vote of last year, while that vote itself had exceeded by a sum of £50,000 the vote of the year which preceded; and that again was an increase of expenditure for which he could not satisfactorily account.—Colonel Lindsay observed that the medical staff was to be increased; but he had been given to understand that one assistant-surgeon was to be taken away from each battalion serving at home. He would much rather that the medical staff was reduced, and that the assistant-surgeons were retained. In London the battalions of the Household Brigade were subdivided into the Wellington, the Portman Street, and the Kensington Barracks; and the hospitals in each case were detached from the barracks. If this reduction were persisted in, there would only be ten surgeons to do the work of eleven, and all hope of leave of absence for these officers at any time must be given up. It might be said that a third medical officer had only been added to a battalion within the last four or five years; but then since the Crimean war the strength of a battalion had been raised from 640 to 800 men; and, besides, more attention was now paid to the sanitary condition of the men than there used to be.—Colonel Knox also deprecated the contemplated reduction of one assistant-surgeon in every battalion stationed at home. He had been requested by a great many commanding officers to express their disapprobation of the plan.—Colonel North did not look with the same horror as some of his friends did on the great expense of the medical department. The sanitary commission recommended most of these changes, and the thanks of the committee are due to the government for the prompt manner in which they had carried out those recommendations. He hoped that the number of assistant-surgeons in the home battalions would not be reduced.—Colonel Dickson moved the omission of £9,823, which it was proposed to allow for increase of the medical staff.—Mr. Baring said a committee was already sitting on this subject and inquiring into it. The effect of reducing this vote would be to throw a large number of the medical staff on half-pay, and to disorganise that branch of the service.—Colonel Dickson did not wish to take one medical officer off the staff. There were plenty of means of reducing the expenditure without interfering with the medical officers.—Mr. Baring said if the vote were reduced, the immediate consequence must be to cause the retirement of a great number of medical officers on half-pay.—Sir H. Verney thought it was so important to take every possible means of preserving the health of the soldiers that he hoped this vote would not be hastily reduced.—The committee divided: for the omission of the £9,823, 46; against it, 66. Majority against it 20.

The Middle Class Insane. On the 19th inst. a public meeting, under the presidency of the Earl of Shaftesbury, was held with the view of promoting the establishment of a benevolent lunatic asylum, where the insane of the middle classes, who are now virtually excluded from private asylums by reason of their heavy charges, might be received on such terms as their relatives could afford, yet deriving all the benefits of the ablest medical care and restorative treatment. The noble chairman briefly, but with great force and eloquence, pointed out the disadvantages under which the poorer portions of the middle class laboured when visited with this most severe of Heaven's afflictions. Single residences were, apart from their medical disadvantages, utterly beyond their means. Private asylums were almost equally so, while the registered hospitals, though offering peculiar advantages in the way of medical treatment, affixed a stigma of pauperism which, to a class so sensitive as those whom they hoped to aid, rather aggravated their malady than otherwise. While bearing high testimony to the vastly improved methods of treatment which were now adopted at all public and most private asylums, his lordship still considered that a special institution was absolutely necessary for the treatment of those whose cause he advocated. The committee did not wish to attempt too much, but confined their views to raising a sufficient amount to enable them to purchase a house and grounds, and so adapt it to their purposes as would enable them to commence their benevolent experiment with a small number of patients. Once established, he did not doubt but that their success would be as great as in the provinces, where similar institutions had been founded with the most satisfactory results. Lord Ebury moved the first resolution, to the effect that such establishments were absolutely required, and earnestly entreating the support of the public towards a charity so deeply needed. His lordship also pointed out the disadvantages under which those intrusted to the care of private asylums laboured. Private asylums were entirely founded with a view to the profit or loss of the principals; and when the duty of cure was on one side, and the inclination of profit on the other, it was not difficult to judge by the universal rule of human nature to which side the balance would incline. Mr. P. Watlington, M.P., Mr. Stephen Cave, M.P., Dr. Conolly, Mr. Solly, and other gentlemen, also spoke in favour of the various resolutions, which were carried *nem. con.* All the medical gentlemen, however, condemned in the strongest terms the remarks which had been made by Lord Ebury on the principals of private asylums. As well, they contended, might such observations be levelled against a physician called in to see a patient, or against a surgeon attending an injured man. Lord Ebury having previously left the meeting, the matter dropped, and all speakers concurred in heartily recommending the proposed institution to the support of the public.

OPERATION DAYS AT THE HOSPITALS.

Monday.......	Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday.	Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday...	St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....	St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.
Friday.......	Westminster Ophthalmic, 1·30 p.m.
Saturday.....	St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Medical, 8.30 p.m.: Clinical Discussion.—Zoological (Anniversary).

Wednesday. Obstetrical, 8 p.m.: Dr. Priestley, "On the Treatment of Cases of Abortion in which the Placenta and Membranes are retained." Society of Arts, 8 p.m.: Mr. J. J. Dahlke, "On Filtration and Filtering Media."—Ethnological.—Royal Institution (Anniversary).—Pharmaceutical, 8 p.m.

Thursday. Harveian, 8 p.m.: Mr. J. R. Lane, "On some Diseases of the Rectum."—Royal, 8.30 p.m.—Antiquarian.—Linnæan, 8 p.m.—Chemical, 8 p.m.

Friday. Western Medical and Surgical, 8 p.m.—Royal Institution.—Archæological Institute.

Saturday. Army Medical and Surgical, 7.30 p.m.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—April 20th, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week……………………	Boys ..1007 Girls.. 954	1961	1210
Average of corresponding weeks 1851-60 ……..		1713	1225

Barometer:
Highest (Tu.) 30.235; lowest (Th.) 30.056; mean 30.128.

Thermometer:
Highest in sun—extremes (Tu. & Wed.) 109 degs.; (Mon.) 67 degs.
In shade—highest (Tu.) 61.8 degrees; lowest (Sat.) 32.5 degrees.
Mean—45.4 degrees; difference from mean of 43 yrs.—0.7 deg.
Range—during week, 29.3 degrees; mean daily, 15.4 degrees.

Mean humidity of air (*saturation*=100), 82.

Mean direction of wind, E. & N.E.—Rain in inches, 0.00.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Mr. Gardner.—A concise report of the cases of bad compound comminuted fracture, referred to by Mr. Gardner as treated by means of the screw splint (a drawing of which he has enclosed to us), would be interesting, if given with an accurate description of the splint. We think that the name of the inventor of the splint should be mentioned. Mr. G. only speaks of him as a "clever provincial surgeon, now deceased." There does not appear to be any novelty in the splint, except an unnecessary piece of mechanism. The screw for extension dates from the Flood.

Mr. T. Paget writes:—"In your number of this week you say 'We last week *published a correspondence* sent to us from the Medico-Ethical Society of Manchester;' and I have sought for it in your pages. I fear that others may have, in the same way, lost their labour, and that some may even surmise that it is an object with the Journal to screen some individual named in the papers you received. Whatever may have been the course of the Manchester Ethical Society, I cannot but think it will be found so similar to that of the South Midland and Midland Branches of the Association in 1858, that I would refer to your number of June 26th of that year (and to one of a date shortly prior to that, which I regret I cannot name), for proof that the feeling of scorn for the superstition or imposture of 'homœo-quackery,' or for those who associate with it, has by no means a narrow basis in our profession."

[Mr. Paget is very unlucky both in his search and in his surmise. The correspondence he sought for in vain is, nevertheless to be found at p. 401, and in the number of the Journal in which he sought for it in vain. It occupies, moreover, about two columns, and is duly labelled with its (invisible?) title. We need hardly add, that the *surmise* of Mr. Paget, therefore, is superfluous, and not likely to be realised, in this instance, at least.—Editor.]

Communications have been received from:—Dr. J. O. McWilliam; Dr. A. T. H. Waters; Mr. G. E. Stanger; Dr. Brown-Sequard; Dr. Skinner; Mr. Paget; Mr. MacCarthy; Dr. Thorburn; Dr. H. Dobell; Mr. J. F. Martin; Dr. G. Hewitt; Dr. Wadham; and Mr. T. M. Stone.

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—Notice is hereby given that the ANNUAL GENERAL MEETING of the Governors of the College will be held at the Office of the College, No. 37, Soho Square, on Tuesday, the 14th of May, at Four o'clock precisely. Ten Members of the Council, viz., Mr. Blenkarne, Mr. Curling, Mr. Edgcumbe, Mr. Fincham, Mr. Lord, Mr. Quain, Mr. Ray, Dr. Sibson, Mr. Sterry, and Mr. Ward, will go out of office on that day, in accordance with the provisions of the Act of Incorporation, and the Council will propose that they be re-elected.

Notice is also given that the Council will propose to the Meeting that the present 25th Bye-Law be rescinded, and the following Bye-law adopted in its place, viz.:

"XXV. Removal or Expulsion of Pupils.—In case the Head Master shall deem the removal or expulsion from the College of any pupil, whether foundation scholar, exhibitioner, or day scholar, necessary for the welfare of the school, he shall make a representation of such opinion and the grounds thereof to the Educational Committee, who shall be authorised to remove or expel such pupil, subject to a right of appeal to the Council by any parent who may be dissatisfied with the decision of the Committee: and until a final decision be given in the case, the Head Master shall be authorised to separate the pupil from the other scholars.

"If, by reason of the disobedience, misconduct, or persistent idleness of any pupil, whether foundation scholar, exhibitioner, or day scholar, the Head Master shall desire to recommend the parents of the pupil to withdraw him from the College, the Head Master shall be at liberty to take this step, but he shall in every such case report to the Educational Committee what he has done, and forward to the Secretary a copy of all the correspondence which has passed on the subject."

The Annual Balance Sheet to the 31st December, 1860, will be ready three days before the Meeting, and may be obtained by Governors on application at the Office.

By order of the Council.
ROBERT FREEMAN, Secretary.
Office, 37, Soho Square, London, W., 23rd April, 1861.

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The following noblemen and gentlemen have undertaken to act as Stewards on the occasion:—

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Practical Observations

ON

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GRAILY HEWITT, M.D., M.R.C.P.,
PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL; LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

[*Continued from page* 435.]

The Causes of Laceration of the Perinæum in Labour (continued).

The other element now remaining for consideration; viz., *the condition of the perinæum itself*, as a cause of laceration, merits our very best attention, for the reason that a great degree of importance has been given to it—whether deservedly or not, it is now my purpose to inquire.

As a cause of laceration, we frequently hear "*rigidity of the perinæum*" spoken of. What does this mean?

In the phrase "rigidity of the perinæum", as it appears to me, we find an illustration of the manner in which the true knowledge of a subject is often impeded and obscured by the use of an apparently simple but worthless expression. The phrase "supporting the perinæum" I have had occasion to find fault with; and for a like reason the phrase now under consideration seems to me to be objectionable, and obstructive to all true advance in the knowledge of the subject. What is "rigidity"? As concerns the perinæum, the physical condition of the parts to which it is applied is a hardness, a resistance, and, it is asserted, a want of dilatability of the soft parts. Now, if the perinæum be examined before labour has commenced, it will be found that the physical condition is precisely that characterised by the foregoing expressions. It is hard, dense, generally thick, and, above all, resistant. What is "rigidity" of the perinæum, more than a persistence of this condition? From the manner in which it has been constantly spoken of by obstetric authorities, it has come to be considered, however, as a positive entity, as a kind of disease with which the parturient process is liable to be affected in certain cases, for which this or that remedy should be used, and its removal thus effected.

The results of my own observation have led me to believe that most of the so-called cases of "rigidity" are cases in which the perinæal structures are rigid, simply because they have not yet been put on the stretch. Cases of "rigidity", it will be recollected, are most common in primiparæ. In such cases, the expulsion of the head through the pelvis and vagina occupies a long time. A period arrives when the head is low down; the attendant imagines that the further descent is arrested by the perinæum; and, finding this dense, thick, and resisting, as the perinæum naturally is, the case is forthwith called one of rigid perinæum, and means are in the next place devised for the purpose of overcoming the rigidity, and of preventing the anticipated laceration; the fact being, that the period of liability to laceration has not even arrived.

We hear of the labour being arrested in its progress for hours together, owing to the rigidity of the perinæum; but the mere statement to this effect is insufficient to substantiate it. In my own experience, limited as it has been, I can recall cases in which the delay would have been attributed, on superficial examination, to the cause here alluded to —"rigidity of the perinæum". The event of such cases, however, generally convinced me that the real cause of the delay was not really the resistance of the perinæum, as it at first appeared to be; and from these and other considerations, it seems most reasonable to conclude that most of the so-called cases of rigidity are really cases of impeded labour, due to deficient power in the contractions of the uterus; or to the circumstance that the presenting part of the child is angular, irregular, or so placed as not to press in the proper manner on the perinæum; or, lastly, to difficulties encountered in the passage of the child through the pelvis itself.

The term "rigidity" ought evidently to be restricted to those cases in which the head of the child, having had time and opportunity, so to speak, for producing an effect on the perinæum, has failed to do so. I have already pointed out how necessary for the production of expansion of the perinæum it is that the stretching force should be applied equably and gradually. Unless it be so applied, the perinæal structures cannot be said to have a proper opportunity for dilatation. It is only when the head has begun to emerge, and has actually separated the labia so as to be visible from the outside, that the edge of the perinæum can be said to be really subjected to the dilating action of the head's pressure—at least, in ordinary cases. Now, where the head is delayed for a long time at the aperture itself, and has advanced so far that any difficulties in the passage of the pelvis itself must have been overcome, supposing them to have existed; where the position and shape of the head are natural, the uterine contractions strong; where the perinæal structures continue dense, firm, and unexpanded,—it is only in such cases, and under such circumstances, that "rigidity" of the perinæum can be properly said to be present. Such cases are extremely rare; but it is easy to see how ordinary cases of delay might be mistaken for them.

On this view of the case, the perinæum would be considered as a passive agent in the matter, and its "rigidity" or dilatability a matter of accident, or determined at least by conditions of other elements and agencies concerned in parturition—the uterus and the fœtus itself.

Some writers—Cazeaux, for instance—attempt to explain the so-called "rigidity of the perinæum" by saying that the muscles of the perinæum are in a state of spasmodic contraction. That the perinæum is provided with muscles is certain; but it is not so evident how spasmodic contraction of these could continue so persistently, so undeviatingly, if we may use such a term, as to constitute the condition actually met with in practice, and to which the explanation professes to apply. But admitting the possibility of such spasmodic action of the perinæum, it would surely be soon overpowered if the force of the uterine contractions were allowed to play upon it continuously; the persistence of such spasmodic action would seem to be indicative of *absence* of uterine contraction.

Again, we hear congestion and inflammation of the perinæum spoken of as conditions liable to arise, and which, interfering with dilatation, justify "support" of the perinæum. This appears to be Dr. Murphy's view of the subject (see his letter in Brit. Med. Journ., Ap. 20, 1861). With all due deference to such an eminent authority, I would submit that there is no evidence of the existence of such conditions in the cases where laceration has been known to occur. The labour in such cases has generally been too rapid for anything that could be properly called "inflammation" of the perinæum to have supervened. Neither can I allow "congestion" a place in the list of causes of laceration, or that it can be considered, properly speaking, as capable of interfering with the process of dilatation. If the position of the head were such as to allow of equable pressure on the perinæal structures, any congestion which existed would be speedily removed by the mere pressure from above. The other elements involved in the question at issue, and alluded to by Dr. Murphy, I have already fully considered in the first three papers of this series.

There are a few cases in which the condition of the perinæum and of the vaginal outlet is such that laceration may be considered to be almost inevitable. I refer to cases where the vaginal outlet is *congenitally very small*. Remarkable as are the stretching capabilities of the skin and tissues of this part of the body, they have their limit; and if the ostium vaginæ be really very small, laceration may occur when this limit has been reached. These cannot be considered as cases of "rigidity". Also, if the outlet have been *artificially narrowed*, the result may be that laceration will occur. In both these cases, laceration would more certainly occur if the uterine contractions were unusually powerful or rapid in their succession.

It has been said that, in some cases, the perinæum has given way in consequence of the textures of which it is composed having undergone *fatty degeneration*, or become weakened by disease. There is no evidence that this can be considered as actually constituting a cause of laceration; and laceration occurs, it must be remembered, more frequently in primiparæ, in whom the perinæum might be reasonably expected to be particularly sound.

Extraneous Causes. There are a few causes of perinæal laceration which require a place for themselves, and are not capable of being easily brought under any of the previous categories. Thus we have, in the first place, those cases in which the perinæum is torn in *a rapid labour, because the head is not allowed to move forwards.* If the legs be forcibly kept in apposition, the thighs being well rounded and well covered with flesh, while, at the same time, the legs are kept in a straight line with the trunk, the head of the child, at the same moment emerging from the vulva, would find its natural course impeded; the consequence would be that an undue stress would be laid on the perinæum. Such an occurrence is related by Dr. Archibald Hall, in his late *Report of the Lying-in Hospital, Montreal.* There was spasmodic rigidity of the lower extremities; and the patient "closed the thighs on the head of the fœtus when it was passing the perinæum"; a considerable laceration followed. (*Brit. Amer. Jour.*, May 1860, p. 197.) This case is analogous to those in which artificial delivery by the forceps, or by extraction after version, is performed, and in which, the operator not taking sufficient care to exercise traction in the proper direction, the perinæum is lacerated almost as a matter of course. The same result may follow in ordinary labours during the extraction of the shoulders, if the operator do not take care to exercise his traction in the proper direction.

Another extraneous cause of laceration is, according to Dr. Leishman, *the artificial support given to the perinæum.* The arguments in favour of this view of the question have been already alluded to, and need not be, therefore, repeated. I do not think that, practically speaking, many cases of laceration really do proceed from this cause, for the reason that the support, as ordinarily administered, is not generally sufficient in degree to produce all the bad effects which might be produced if more force were applied; but I quite believe that, were the practice recommended by Dr. Ramsbotham carried out universally, we should hear much more frequently of laceration taking place. Those in favour of supporting the perinæum adduce the fact that severe laceration has sometimes occurred at the last moment, *owing to the temporary or accidental discontinuance of the support.* Of the actual occurrence of laceration under these circumstances, there can be no doubt. Smellie records a case of this kind in his own practice. In his letter in this Journal of April 20th, Dr. Murphy defends anew the practice of "supporting the perinæum," on the foregoing argument. To this argument, it has been well replied by Dr. Leishman that it is the artificial treatment of the perinæum which produced the laceration in such cases. The equable and uniform dilatation of the perinæal structures having been interfered with, the laceration occurs because the expulsive action of the uterus, being no longer opposed, effects in a moment what naturally it would have occupied some considerable time in accomplishing. To the force exercised by gradual dilatation, the perinæum can accommodate itself: how and why, I have already explained.

The use of instruments. That laceration of the perinæum is very frequently due to the use of instruments, such as the forceps, there can be no question. Incidentally, I have already had occasion to remark upon this fact. I have stated my belief that the use of the forceps and the laceration are not, however, by any means necessarily connected. With proper care, the use of the forceps *need* not be dangerous to the perinæum. The danger is in exercising traction in the wrong direction. If traction be exercised downwards, laceration is and must be, unless the perinæal structures be most unusually distensible, almost inevitable. If the perinæum is to be maintained in a state of integrity, the forceps must only be used by one well acquainted with the mechanism of parturition, and who has studied the operations of nature closely enough to imitate them. The accidents accruing to patients from the use of the forceps by individuals who have never taken the pains to master the rudiments of the obstetric art, have brought a discredit to the instrument which ought, in many cases, to attach to the operator himself.

The chief conclusions to be draw from the foregoing account of the causes of laceration of the perinæum, are—that laceration is more likely to occur in primiparæ, especially when advanced in life: and that a not unfrequent cause is rapidity of labour, especially when associated either with want of proper relation between the child and the maternal passages, or with malpresentation on the part of the child.

It is perfectly useless to attempt to generalise more completely respecting the causes of laceration, for the reasons already stated. Laceration of the perinæum is not constantly produced by the occurrence of the same circumstances. In one case, one combination of circumstances produces it; in another case, the same combination being present, no laceration occurs. Unquestionably, the causes of laceration are many and various; and this is one of those cases, not so uncommon as is usually supposed, in which it is not in the nature of things that "simplicity" should be attainable, however much it may be desired. In such a complex process as is involved in the expansion and dilatation of the perinæum, not one, but every element in the case must be duly weighed and allowed for, in arriving at any conclusion as to the cause of the laceration.

[*To be concluded.*]

Clinical Observations

ON A

CASE OF DISEASE OF THE CORPUS STRIATUM.

OCCURRING AT THE LIVERPOOL NORTHERN HOSPITAL.

BY

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PHYSICIAN TO THE HOSPITAL.

The uncertainty which still exists in our knowledge of the functions of different portions of the nervous centres, and more especially of the chain of ganglia which are placed at the base of the brain, and the conflicting nature of the symptoms that are met with in connexion with the pathological conditions of these structures, render it desirable that all cases possessing more than ordinary interest, and which may eventually serve to illustrate some of the more abstruse points of neuro-physiology, should not be lost sight of. The following case appears to me of sufficient importance to deserve being placed on record.

Case. George Gibson, aged 43, a man of colour, cook on board a vessel, was admitted into the Hospital on April 11th, 1860. He had previously been a patient in the Hospital, suffering from an attack of pleurisy, from which he recovered, and had been discharged from the house six weeks before the time of admission mentioned above. It appeared that, whilst under treatment for the pleurisy, he was profusely salivated with a single small dose of mercury. After his discharge, he did not follow his ordinary occupation, but remained unemployed in lodgings in the town. The only symptoms he was troubled with, he said, were those of general weakness. About eight or nine days before admission, he began to feel a want of power in the left arm and leg. This symptom gradually increased, and was attended with pain in the head.

On admission, there was no hesitation in his manner; he was able to speak distinctly, and to answer questions readily and well. He gave a clear and intelligible account of the accession and progress of his symptoms, of which he seemed to think very lightly. There was almost complete paralysis of motion of the left arm and leg; the tongue was protruded slightly to the left side, and the mouth slightly drawn to the right. He could *close* both eyes, but was unable to *open* the right one fully. Sensation was perfect on both sides, as well on the side where there was loss of power as on the other. He complained of pain all over the right side of the head. The pulse was 50, and very laboured. He was ordered some decoction of aloes, a turpentine enema, and a little brandy. He continued in the condition above described up to the 14th, early in the morning of which day he was found in a perfectly comatose state. At midday, the pulse was 54, irregular and laboured. He could not be roused. He was breathing noiselessly; but, when disturbed, stertor came on. He died at 3 P.M. of the same day.

Autopsy. On removing the calvarium, the surface of the brain was seen to be somewhat pale. There was no fluid in the arachnoid. The brain-substance, with the exception of the parts mentioned below, was firm and apparently healthy. The right lateral ventricle contained a quantity of semifluid matter, consisting of disorganised brain-substance mixed with blood. The walls of the ventricle were rough and flocculent, and marked with numerous vascular spots. The substance of the hemisphere around the ventricle, to the extent of a quarter of an inch in thickness, was softened so as to be readily washed away with a gentle stream of water. The right corpus striatum was softened and disorganised throughout, and effused blood was mixed with the broken up brain-substance. The rest of the brain, including the substance of the optic thalami, was healthy.

It has been the opinion of some physiologists, that the corpora striata constitute the centres from which motor influence of a voluntary kind is derived; that the will, generated in the grey matter of the hemispheres, acts through the medium of these centres. Supposing this theory to be true, anything interfering with the transmission of the mandates of the will to the corpora striata ought to be followed with more or less paralysis of motion, even supposing those bodies to remain healthy. On the other hand, disease of the corpora striata, leaving untouched the remaining portions of the brain, ought to produce the same result, although from a different cause. Physiologists who have attributed the above mentioned function to the corpora striata, have generally considered the optic thalami as the centres of sensation. Were all cases as definite in their symptoms and *post mortem* appearances as the one detailed, some ground would be afforded for our belief in a part at least of the theory; for we had here destruction by a gradual process of one corpus striatum, the thalamus remaining intact, with paralysis of motion, sensation being perfect. Unfortunately, however, for the theory, such results are not constant; disease of the thalamus being sometimes attended with loss of motion, and disease of the corpus striatum with loss of sensation. Further, it is very difficult to judge in any given case whether the symptoms produced, either of loss of motion or of sensation, may not be the result of reflex action, rather than directly caused by the disease itself; for, as has been pointed out by Dr. Brown-Séquard, when we consider the variety of symptoms, or the total absence of symptoms, which may accompany diseases of the brain apparently of a similar character and having a similar seat, it is impossible to conclude that all the symptoms which arise are directly produced by the affection itself. We are compelled, therefore, rather to look upon them as the result of reflex action, starting from the nerves of the blood-vessels which supply the part where the lesion exists.

Illustrations
OF
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

GREAT NORTHERN HOSPITAL.

COMPOUND COMMINUTED FRACTURE OF THE FEMUR: ACUTE NECROSIS OF A LARGE PORTION OF THE SHAFT: AMPUTATION: SUCCESSFUL RESULT.

Under the care of G. Lawson, Esq.

G. P., aged 24, a healthy man, was admitted into the Great Northern Hospital on November 1st, 1860, under the care of Mr. Lawson, with a compound and comminuted fracture of the left femur. At the time of the accident, he was working on a plank placed between two girders, and was drilling a hole in one of them. By some mishap, a slight separation of the girders took place, and the plank, which had but a small rest at each extremity, fell, and with it the men who were sitting on it. The height from the ground was about twenty feet.

On his admission, there was found a compound fracture of the femur, which had extended into the joint. The external wound was very small, not sufficient to admit the finger. The patient at first progressed most favourably. For several days following the accident, there was considerable effusion into the knee-joint; but this ultimately entirely subsided. Suppuration took place between the extremities of the bones; this soon became excessive, and, great tenderness extending for some distance up the femur, it became evident that acute necrosis of the shaft of that bone was going on.

As the man's health was now beginning to fail, and as, on examination, extensive necrosis of the whole circumference of a portion of the shaft of the femur was detected, Mr. Lawson determined to amputate the limb. This he did on January 10th, by the ordinary flap-amputation, at the junction of the upper with the middle third of the bone. The man progressed most favourably. The ligature came away on the 25th, and a most excellent stump resulted.

On examination of the parts after removal, it was found that a vertical split had separated the two condyles of the femur; and that these had firmly united, and, from being in direct apposition, had done so without the formation of any callus. A piece of the shaft of the femur, about two inches in length, was perfectly dead; and a rough irregular line of demarcation indicated where the separation of the necrosed from the living bone would have taken place.

M. Cloquet, at a late meeting of the French Academy of Sciences, stated, "That he was present at the famous duel between the Deputy Dulong and Marshal Bugeaud. The opponents were placed at forty paces distant. M. Dulong was struck when they had advanced to thirty-five paces. The ball, striking the frontal bone, divided into two parts: one, continuing its course, passed directly through the brain, and was flattened against the internal surface of the occipital bone; the other coursed round the skull between the bone and the integuments, and passed out at the part opposite to where the portion was lodged inside the skull."

Original Communications.

CASE OF SYPHILIS, ARISING PROBABLY FROM SECONDARY INOCULATION: INFECTION OF WIFE AND OFFSPRING.

By F. Wildbore, F.R.C.S.L.(Exam.), Brighton; formerly House-Surgeon of the Lock and Westminster Hospitals, and late of the Coldstream Guards.

The recent publication of Mr. Henry Lee on the subject of syphilis, and the editorial remarks thereon in this Journal, have caused me to look over again the notes of a very interesting case of this disease, which I have kept with care and minuteness for upwards of eight years. I have abstracted it as briefly as I can, consistently with clearness. The difficulty hitherto presented to my mind has been to know, whether to rank it as a case of primary infection with an unusually rapid manifestation of secondary symptoms, or as one of secondary inoculation of the disease from a female suffering from secondary syphilis. I have over and over again attempted, when residing at the Lock Hospital, to inoculate from the secretion of mucous papules, and I have seen others try the same thing, with the uniform result of failure; and as I knew of no well authenticated case of this having been effected; or of secondary inoculation being brought about by other means, I had almost dismissed from my mind the possibility of conveying infection in this way.

Mr. Lee's observations on this subject in Holmes's *System of Surgery* have thrown a new and very interesting light upon my case; and I am now disposed to consider that it is really one of secondary inoculation, and that the period which elapsed from July 17th to some days prior to August 7th, at which period the mucous papules were fully developed, was in fact the period of incubation before the hardness appeared.

The subsequent details of the case have, besides this, many points of interest in them. The intractable nature of the symptoms exceeds anything I have seen either in civil or in military practice; and the patient's ability to bear mercury unharmed is something remarkable. Although the disease has reappeared so often, there has been an entire absence of any well marked tertiary manifestations. The wife, no doubt, was affected through the fœtus during pregnancy; but it was not till after the birth that the symptoms showed themselves. The disease in the children has been very manageable; as, indeed, I have always found it to be when mercury is used by inunction. It will be observed also that the wet-nurses escaped.

Case. An officer, aged 27, who had just recovered from a gleet of long standing, but who had not suffered from any previous syphilitic affection, consulted me three or four days after connection, on July 17th, 1852, for a small abrasion of the mucous membrane at the corona glandis. It was touched with caustic then; and on the 18th, when it was apparently healing.

On August 7th he came to me again; and I then found several indurated, raised, and flattened patches on the prepuce, of the size of a threepenny piece. They were near to the corona glandis and frænum; and one larger than the others was superficially ulcerated. He had felt tingling there for some days. I noted them at the time as having all the characters of condylomata or mucous papules. There were also several enlarged and slightly painful glands in the right groin. He was ordered blue pill and black wash.

Aug. 27th. The ulceration had healed.

Sept. 18th. All the hardness had disappeared. He took the mercury six weeks, and the gums were slightly affected. He grew lean and shaky under it.

Oct. 3rd. Eleven weeks after connection, I observed that his tonsils were enlarged and honeycombed, and that they had superficial ulcerations upon them; and that the glands under the jaw were swollen. He was ordered Plummer's pill, with syrup of sarsaparilla and iodide of potassium.

Nov. 10th. While this treatment was continued, psoriasis began to show itself on the scrotum, and there were some scattered pimples about the scalp.

Nov. 20th. He was put upon a course of mercurial inunction, and the other remedies were omitted. The psoriasis of the scrotum was then extending, and the ulcerations on the tonsils of the same character had reached the soft palate, and they were assuming the appearance of mucous papules, resembling very much those seen on the penis on the 7th of August. In addition to the inunction, he took for a time one-sixteenth of a grain of the bichloride of mercury three times a day in tincture of bark.

Jan. 4th, 1853. No trace of the disease remained; but he was directed to continue the mercury till January 17th, to make out a two months' course. The gums were affected during nearly the whole of this period.

Jan. 17th. He began to take syrup of sarsaparilla with nitric acid, to improve his general health; but, unfortunately, on the 21st of February, ulcers again manifested themselves on the tonsils, and one was deep and excavated. Plummer's pill was substituted for the sarsaparilla and acid; and, at the expiration of a six weeks' course, on the 4th of April, he was again sound, and he resumed the sarsaparilla and acid.

May 2nd. The same symptoms as existed on Nov. 20th reappeared; but the psoriasis and the ulcerations on the tonsils were wider spread. Mercury by inunction was again resorted to for two months; and again there was an apparent cure.

In the spring of 1854, the old symptoms broke out again as badly as ever. Mercury for six weeks by inunction was again appealed to; and all traces of the disease vanished.

Thus it will be seen that in less than two years my patient had been under mercury forty-one weeks, including two courses of Plummer's pill. Sarsaparilla and iodide of potassium were valueless in this case as antisyphilitics. During my absence from England in this year with my regiment, he was advised by a surgeon that he was cured, and that he might marry.

At midsummer 1855, a child was born with syphilitic ulcerations upon it about the anus; and upon the wife also ulcerations appeared about the back and nates a month after childbirth. For the child, at a month old, mercury was used on a garter, and the ulcers healed. Mercury was given to the mother also, as soon as she could bear it; and she got well.

One year subsequent to this, mercury was resorted to again for mother and child, to remove some coppery stains which had exhibited themselves. At this period (the autumn of 1856) all the father's old symptoms came back: the throat was ulcerated as before, the psoriasis was more extensive, and the scalp was covered with impetiginous scabs. A very carefully directed course of inunction of six weeks' duration, carried on in bed, removed once more all outward traces of the disease. This was the seventh course of mercury; and, except being a little pulled down, he expressed himself as feeling none the worse for it.

In 1857, twelve months after the father's seventh course of mercury and the mother's second, a second child was born. This infant had not any outward mark of syphilitic disease; but it was puny and withered-looking, having a pained expression of countenance and corrugated brows. It did not thrive well; but at nine months old it improved much, after a slight course of mercury on a garter had been given.

In 1858 a third child was born, apparently healthy. A month, however, after birth, a large patch of psoriasis came out on the forehead, which quickly yielded to inunction.

When the second child was fourteen months old, it had but six teeth. I suggested a second mild mercurial course; and teething proceeded very rapidly after this was done.

Since the year 1856 there have been no visible marks of disease in either parent, except perhaps a little very pale staining of copper on the back of the father; but in 1859 and in 1860 there were miscarriages at about seven months, with great hæmorrhage. On the latter occasion, it was said that the placenta had syphilitic indications upon it, and in consequence both parents have since had a course of mercury—the mother's third and the father's eighth course. The three children now look perfectly healthy. A little branny eruption now and then comes on the skin, which iodide of potassium soon removes. The teeth are in all respects of the usual character of milk-teeth; they are not marked in any way. Wet-nurses were employed for each of the three children, and no infection resulted.

DR. BEALE'S LECTURES

ON THE

STRUCTURE AND GROWTH OF THE TISSUES OF THE HUMAN BODY.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, 1861.

The third lecture was delivered on April 22nd. Dr. Beale commenced with the following summary of the conclusions arrived at in his last lecture. He had endeavoured to show that mildew, and all such simple living structures, were composed of matter in two states—*germinal matter* and *formed material;* that the *formed material*, of which the external envelope was composed, was once in the state of germinal matter; and that the inanimate matter, which formed the pabulum or nutrient substance, passed through the outer covering of formed material into the germinal matter, in the particles of which it became living. Here all those wonderful powers, which the germinal matter itself possessed, were communicated to the inanimate particles. Dr. Beale brought forward facts to show that the germinal matter was composed of spherical particles, and these of smaller and still smaller spherules. He believed that these spherical particles always move in a direction from centre to circumference. The formed material differs as much from the germinal matter in its structure as in its properties. The germinal matter alone grows and is active, and can alone animate inanimate matter. The properties of the formed material depend upon the powers of the germinal matter from which it was produced. These powers were derived from the germinal matter, which gave it origin; and so on from the beginning. The germinal matter possesses the power of infinite growth; by which statement Dr. Beale meant that this material will continue to increase, as long as it is placed under favourable conditions and supplied with the proper pabulum or nutrient substances. The germinal matter is coloured by alkaline colouring matters, especially by carbomide; while the formed material remains perfectly colourless, although it is much nearer to the coloured solution than the germinal matter. The lecturer held that we were not able to form any opinion as to the size of the smallest particle capable of independent existence and endless increase; but he felt sure that the smallest living particles we can yet discern have been growing for some time before they were large enough to be seen through our most perfect microscopes.

However large and complex the organism may be, it is very easily separated into certain parts or organs, set apart for the performance of distinct offices. The body of a vertebrate animal contains bones, muscles, fat, the liver, kidneys, the brain and nerves, etc.

Each of these may be resolved into elementary organs. An entire bone may be regarded as consisting of an assemblage of certain small portions, each of which contains every structure essential to the constitution and growth of bone. A lung, or a kidney, or the liver, may, in the same manner, be shown to consist of elementary lungs, kidneys, or livers.

In different animals, the size of these elementary organs differs, but not to the same extent as their number. An organ of a large animal like the whale differs from the corresponding organ of a small one like the mouse, enormously as to the number of elementary organs of which it is made up, but in a much less degree as to the size of each of these.

Each elementary part is composed of several structures having very different properties. An elementary lung is composed of a delicate transparent membrane, with elastic tissues, vessels, and a prolongation of the bronchial tube. These structures are themselves compound. Connected with the smallest arteries we find nerve-fibres, elastic tissue, muscular tissue, and epithelium. The nerve-fibres, muscular fibre, and epithelium, are composed of elementary parts; and each elementary part consists of matter of two states—*germinal matter*, active and growing, capable of multiplying itself; and *formed material*, passive and incapable of multiplying itself, which was once in the state of germinal matter.

An elementary part of the liver in the same way is composed of the germinal matter within, and the formed material externally; the outer part of the formed material is gradually altered, and is at last converted into bile and sugar.

An elementary part of bone consists of a mass of germinal matter, external to which is formed material, which gradually becomes impregnated with calcareous salts from without inwards, channels (canaliculi) being left, along which fluids pass to and from the germinal matter in the centre, which gradually becomes inclosed in a space (lacuna).

An elementary part is seldom more than the one-thousandth of an inch in diameter, and frequently it is very much less. In the adult organism, it is often difficult to recognise the elementary parts in all cases, in consequence of changes having occurred in the course of their growth; but in the early life of every creature they are distinct enough in every tissue. In the higher animals, these elementary parts are arranged in certain collections which possess very different endowments.

In some of the simplest living beings, the entire organism may be regarded as consisting of one elementary part.

Every elementary part comes from a preexisting elementary part; but it does not follow that its endowments are to be the same as those of the elementary part from which it sprung.

The elementary part of a tissue must not be looked upon as bodies which, having assumed a definite form and reached a certain size, remain perfectly stationary, but as structures which are continually undergoing change—not a single particle of which they are composed is still. It is true, the movements occur so slowly in some as to be imperceptible, except after long intervals of time; while we can scarcely conceive the rapidity with which change takes place in others. But movements must occur in all, and they take place in the same direction. The elementary parts, which we examine in our microscopes, were undergoing change just before they were removed from the living structure. We have stopped the changes at a certain point; and, as the ages of the elementary parts differ materially, by carefully comparing the appearances in several, we may obtain, after numerous observations, data which shall enable us to form something like a connected history of the life of one of them.

These elementary parts are usually termed *cells;* and the cell is defined as an organ, consisting of a *wall* permeable to fluids, with certain contents within, and usually, but not constantly, a nucleus. In the process of secretion, it is believed that certain materials pass through this wall into the interior of the cell by endosmose, and then become altered by powers existing in the cell or resident in the nucleus, and, having undergone conversion into new substances, pass through the wall of the cell by exosmose, and constitute the special secretion. In tissues, it is believed that the cell exerts a peculiar action on the matter which surrounds it, by reason of which this manifests certain peculiar and characteristic properties.

It is the exception rather than the rule to find that the contents of a cell are in a fluid state; and when this is so, numerous living particles are suspended in it. In the liver-cell, the contents are certainly tolerably firm; in the kidney-cell, they present the same characters. Their consistency generally is such, that it is impossible to conceive the flowing in and out which is imagined.

According to the generally received theory, the cell-wall is considered a most important structure; but it does not exist constantly. There is a very large class of the lower animals from whose bodies protrusions may be formed in different parts, and these protrusions may meet here and there. Where they touch, they coalesce. Clearly, then, there can be no investing membrane here; neither is a living structure of this kind confined to the lower animals. It exists in man himself. Dr. Beale has seen such protrusions from mucous particles, both from the nose and also from the bronchial tubes, under a power of 1,700 diameters. A portion of the mass slowly extends itself outwards; perhaps three or four such outgrowths may be seen in different parts of the mass. If detached, they assume the spherical form;

but if two come into contact, they coalesce. These movements only lasted for a minute, or less, after the mucus was transferred to the glass slide. Protrusions may be often observed to occur from the white blood-corpuscles; and in rare cases the red blood-corpuscles adhere so intimately to each other, that it is difficult not to believe that the outer part or their walls consists of a soft viscid matter which runs together when several come into contact.

It is clear, therefore, that the cell-wall is not a constant structure, and that living organisms and their elementary parts may exist without it. Again, in the younger so-called cells of the cuticle, contents and a cell-wall are figured and described by authors generally; but in the old cells, the contents become altered and incorporated with the wall in a manner which it is not easy to explain. The liver-cell is usually appealed to as an excellent example of a cell; yet who has proved the existence of a membrane? Seven years ago, long before he had attempted to form any general views of structure, Dr. Beale had tried in vain to prove the existence of this cell-wall.

The following specimens were sent round:—

14. Elementary parts (cells) from the liver of the mouse. Many contained two of the so-called nuclei, and some contained three or four. In some elementary parts, the outline was sharp and well-defined; in others, it was rough and angular; and in some, the outer parts seemed to be undergoing disintegration. No cell-wall could be demonstrated around these masses. The outermost part of the formed material gradually became converted into bile. The largest of the so-called nuclei were, in fact, becoming elementary parts; and what would be called their nucleoli would then become nuclei. Some of the masses were very irregular in shape, angular, and often much elongated, as if they consisted of soft material which had been moulded in a tube.

15. Elementary parts from the liver of an old man, aged 74. The liver appeared healthy.

But it may be said, there can be no doubt as to the cellular nature of the red blood-corpuscle. This is admitted by all to consist of a membrane with certain fluid coloured contents. A nucleus is to be demonstrated in some, although not in the adult human blood-corpuscle. The opinion generally received is certainly that the human red blood-corpuscle is a cell with red contents, the nucleus of which has disappeared, or else it is the free nucleus of a cell; and here the question is dismissed.

But the blood-corpuscle may also be regarded as a corpuscle consisting of matter of different density in different parts, being hardest externally, and gradually becoming softer, so as to approach to the consistence of fluid towards the centre. Dr. Dalton, of New York, has expressed this opinion of the structure of the blood-corpuscle; and Dr. Beale believed some few other observers entertain similar views.

The lecturer had never succeeded in seeing the cell-wall said to exist, neither had he been able to confirm the assertions with regard to the passage of liquid into the interior of the corpuscle by endosmose, its bursting, and the escape of its contents through the ruptured cell-wall. When placed in some liquids, many of the corpuscles swell up and disappear. The red blood corpuscles from the same animal differ in character in a much greater degree than observers generally seem disposed to admit. Some are darker and harder than others. Some are so transparent as to be invisible without the greatest care, and corpuscles may be found which are not more than the fifth or sixth of the size of an ordinary blood-corpuscle. Dr. Beale had failed in his attempts to colour the red blood-corpuscles drawn from capillaries, or from a vein, with carmine, but he had succeeded in colouring many in clots taken from the vessels after death; and, in some instances, certain of the corpuscles within the capillaries of a stained tissue had been coloured. These corpuscles were very much smaller than the white corpuscles, which are always very readily coloured, and did not exhibit the well-known granular appearance characteristic of the latter. It was inferred, therefore, that they were young red blood-corpuscles.

The majority of the red blood-corpuscles of the human subject are certainly not to be coloured by carmine by employing the same process as that by which the white corpuscles are always so readily coloured. The granular or nucleated corpuscles of the embryo are readily coloured. The nuclei of the corpuscles of the frog become coloured; but the external portion which is coloured naturally is not tinged by carmine. In winter the capillaries of the frog contain numerous oval corpuscles surrounded by a very thin layer of the external coloured portion, so that they are not more than half the dimensions of the corpuscles when the animal is active. Dr. Beale concluded, therefore, that the nucleus of the frog's corpuscle consists of germinal matter, and the coloured portion of formed material; and that when the animal is active, this formed material is gradually being dissolved away at the surface, while new formed material is produced from within; the oldest part of the formed material being at the surface of the corpuscle, the youngest in contact with the germinal matter from which it was formed.

Of the red corpuscles of mammalian animals, some are destroyed by certain chemical reagents which have scarcely any action on others; and they are not all altered in the same degree or with the same rapidity by the action of water, weak alcohol, syrup, and various fluids, which probably only produce a physical change. Neither do all the particles in a drop of blood undergo the same changes immediately after it has been drawn from the living body.

Dr. Beale thought that the red corpuscles of man are formed from the germinal matter of the white corpuscles. A particle set free in the current of the blood would appropriate the nutrient material and would grow. During this period it would be coloured by carmine. Gradually, however, the formed material increases, and the germinal matter in the centre dies. The corpuscle now undergoes another series of changes. It begins to be dissolved away at the surface, and at last is, without doubt, entirely converted into substances which are dissolved by the serum, and its place is taken by a new corpuscle.

But the fact which seemed to prove most conclusively the nature of the mammalian red blood-corpuscle was this. Guinea-pig's blood, as is well known, crystallises very readily in tetrahedral crystals; and if the process be carefully watched in a drop of blood which has been treated with a very little water, and covered with thin glass, and sometimes even without the addition of water, certain corpuscles will be seen to become angular, and four or eight prominent angles will be observed, while others will exhibit the stellate appearance familiar to every one. In this remarkable case, then, *the entire blood-corpuscle may be seen to crystallise.*

Dr. Beale had seen one corpuscle gradually become one tetrahedron; and he asked, how can there be a membrane here? The whole process seemed inconsistent with the existence of such a structure. The crystals coalesce and larger crystals are formed; but no membranes can be seen. Two crystals may come into close contact, and gradually become incorporated, which could not take place if they were invested with a membrane. It is true, that some of the blood-corpuscles are incorporated in the crystalline mass, and may be seen for some time amongst the red crystalline matter; but these are entire corpuscles — the lecturer concluded young ones—not merely cell-walls.

In the kidney, and indeed in many other structures, there is the same difficulty in satisfying oneself as to the existence of a cell-wall. The well-defined outline exhibited when elementary parts are placed in water, which is received by many as evidence of the presence of a cell-wall, can be exactly imitated artificially. Such facts as these, and the changes which he has observed to take place in particles precipitated from fluids have caused Mr. Rainey to come to the conclusion, Dr. Beale thought prematurely, that the growth of bone, and even of some of the soft tissues, may be explained on physical and chemical grounds alone.

These observations of Mr. Rainey's, Dr. Beale considered most interesting and most important; and he would refer to them frequently in discussing the anatomy of bone and teeth; but in all these tissues, he said, he had no difficulty in demonstrating the existence of living matter, and without this living matter the tissue never could be formed. Dr. Beale said he could, without fear, assert that in every living tissue there is germinal matter and formed material. The germinal matter may die when the formed material has reached a certain thickness; but the lecturer maintained that this formed material was, in all cases, once in the state of germinal matter, and could never have been produced except by the changes taking place in living particles.

[*To be continued.*]

Tincture of Indian Hemp: Mode of Using it Internally. This is, Dr. W. Fraser observes, one of those resinous tinctures which precipitate so readily when added to water, that it is difficult to exhibit it to patients in the form of drops; and its prescription in the condition of draughts suspended by mucilage, etc., is not much more satisfactory. He has sometimes desired it to be dropped on a fragment of soft bread just at the time of using it, and thus eaten; it is not by any means unpleasant to the taste, and the dose is fully taken—a matter of no slight advantage.

Progress of Medical Science.

Treatment of Entropium and Trichiasis. The following plan of treatment is recommended by Dr. Williams, surgeon to the Cork Eye Infirmary. A small piece of potassa fusa having been placed in a porcelain capsule or bottle, and a drop of water being added, the point of a fine needle—or a small knife, if the inverted lashes be in tufts—is dipped in the liquid caustic potash, and then plunged into the tarsal margin along the course of the hair, or tufts of hair, to the depth of the eighth of an inch, at which depth the hair bulbs lie. Dr. Williams recommends a Desmarres' ring-forceps or horn spatula to be placed under the lid for the protection of the globe, and better performance of the operation. The pain attendant on the puncture is trifling, and may be instantly removed by applying cold water with a small brush to the border of the lid. On the second or third day the lashes thus treated are removed with a forceps; they are pulled out without any difficulty, and are blackened towards the roots. The bulbs of cilia are completely destroyed, never to be reproduced. Unless an entire row of lashes is to be removed, no inflammation follows the operation; even in this case it is of little moment. For the removal of nævi, fungous growths, small tumours and warts in any locality, punctures with a needle or small knife dipped in the liquid caustic potash will be found useful, as the needle or knife burns along its subcutaneous track. (*Dublin Hosp. Gaz.*)

Reybard's Operation for Paracentesis Thoracis, as modified by M. Trousseau. The patient is to be placed on the edge of the bed, taking care that he shall experience the least possible motion, in order that the portions of false membrane, which would otherwise be detached, may not float in the fluid and obstruct the cannula; the trunk should be elevated. The patient being placed in this position, an imaginary line is to be drawn from the anterior edge of the axilla to the level of the eighth rib, a little behind which spot the puncture should be made. A small incision is first made with a lancet through the skin, as if for the operation of venesection; the integument is then to be drawn upwards with the fingers, so that the incision may correspond to an intercostal space. The cannula is passed through the centre of a circular piece of goldbeater's skin or pig's bladder previously moistened, which is then tied firmly round its neck, so as to project over the orifice for some distance. The trocar and cannula thus armed are pushed into the chest where the skin had been cut, to the depth of an inch or an inch and a half. As soon as the operator feels the cannula grasped by the muscles, the trocar is to be withdrawn, when the fluid gushes out. If a shred of membrane or an albuminous flake oppose the passage of the liquid, a double-eyed gum-elastic probe, of a little less calibre than the cannula, is procured. The goldbeater's skin is to be partially opened, and the probe introduced into the cannula; it removes the obstruction, while its eyes give passage to the fluid. This method was devised by M. Lenoir. The removal of the fluid must be assisted by steady pressure on the abdomen and on the chest; and when it has ceased to flow, the trocar is to be rapidly withdrawn. The skin instantly falls back, the superficial and deep openings no longer correspond, and the only dressing required is a small piece of court-plaster over the wound. At the same time that the chest and abdomen are relaxed, the air, drawn in by the tendency to a vacuum in the cavity lately filled with serum, rushes through the bronchial tubes, extending them and expanding the lung, which partly resumes its normal dimensions, allowing the respiratory murmur to be again heard over two-thirds of the chest, provided the effusion was recent and the adhesions not very firm.

Hæmatic Swelling of the Ears of the Insane. Dr. Gudden points out that ears closely resembling those of the insane affected with blood-swelling are not unfrequently met with amongst ancient sculptures depicting pugilistic athletæ. This condition of the ear was produced by the blow given by the strong arm of the boxer, his hand being enveloped by a leather thong. He next criticises the explanations of their occurrence in the insane usually given, as exemplified in Fischer's treatise. Fischer believes that such swellings are never met with, unless preceded by chronic inflammation of the cartilage and its covering, the anatomical effects of which consist chiefly in the production of cavities of various sizes in the substance of the cartilage, or between it and the perichondrium. These, the author maintains, are due to the employment of violence, and according to the degree of this sanguineous effusion also may or may not take place—any inflammation which may result being only secondary to such violence. He also disputes the statement made by Fischer and other authors that these effusions take place only under the influence of scorbutic or other dyscrasies or cachexiæ. Among the proofs which he adduces of violence being the cause are the fact of marks of finger-nails being frequently present, the left ear (more exposed to violence from the right hand) being usually the one affected, and the greater frequency of the occurrence in men than in women; the latter being less exposed to violence, and their ears being better protected by their hair and by their dress. Paralytic patients (paralytic males being more frequent than females) are more liable to such swellings than others, not owing to the presence of a dyscrasia, but from their greater liability to ill-usage and their insensibility to its effects. As to the assertion made by Flemming that this injury is self-inflicted, the author replies that, during ten years residence in large asylums, he has never met with an instance in which the injury could be traced either to the patient himself or to other patients, while he has been often able to bring it home to the attendants. The frequent accompaniment of the marks of finger-nails show that the ear has been seized and violently pulled by the fingers. Since he has laid down the rule in the asylum to which he is attached of holding the attendants liable for the occurrence of the swelling, the number of cases has remarkably diminished. (*Allg. Zeitsch. fur Psychiatrie;* and *Medical Critic.*)

Ethereal Tincture of Valerian in Convulsions of Children. Dr. Hardee of Savannah has employed this remedy, as he asserts, with very great success in convulsions uncomplicated with organic disease. He considers it especially useful in convulsions arising from gastro-intestinal irritation, irritation from teething, or in children whose nervous systems are predisposed to convulsions from very slight causes. The dose is from three to five minims to a child one year old.

Treatment of In-growing Nail. Hold a small piece of tallow in a spoon over the flame of a lamp, until it melts and becomes very hot; drop two or three drops of it upon the seat of the granulations, and direct the patient not to attempt to put on a shoe until a cure is accomplished. After some days you will find the granulations gone, and the pain and tenderness effectually relieved. Then pare away the exposed edge of the nail, and in a few days the patient will be able to walk about, wearing a shoe with comfort; and without the slightest probability of a return of the complaint. This simple method of Dr. Gilman, is one suitable for self-application, quick in giving relief, effectual in curing, without pain, and last, though not least, obviating the risk in resorting to chloroform. (*Boston Medical and Surgical Journal.*)

Union of Strands of Hair across the Incision in Wounds of the Scalp. A mode of dressing scalp wounds is being introduced in America, by which sutures are avoided, and it is said that the plan adopted has hitherto been very successful. It consists in shaving the head round the neighbourhood of the wound, leaving on each side of it small tufts of hair at points exactly opposite, and corresponding with places of entrance and exit of sutures if they had been used. The united ends of each pair of tufts are passed through some perforated duck-shot, the shot is then grasped by a strong pair of forceps, and passed down sufficiently to unite the edges of the wound when it is firmly nipped, "and the most complete and satisfactory fastening that can be seen for wounds of the scalp is effected." The hair above the shot is to be reserved, a cold compress applied, and lightly bandaged. Very often it is not necessary to remove any of the hair from near the wound. (*Southern Med. and Surg. Journal.*)

Friction in Asphyxia. The *Bulletin de Therapeutique* mentions a case belonging to M. Pingault of Poictiers, in which frictions were successful. A young man had received in a duel a penetrating wound of the chest, and lay cold for fourteen hours, with very distant beats of the heart. During all this time, two men made vigorous frictions with hot towels which were handed to them; and, at the end of the fourteen hours, the pulsations became more frequent, and the patient finally recovered. A second case is mentioned, where version was performed in placenta prævia, and the lady was dying from hæmorrhage. Three hours' friction with hot spirits over the præcordial region, and on the whole body with towels, restored her.

The Diagnosis of Ringworm to the practised eye, Mr. Hutchinson says, is not usually difficult. Its patches differ from those of eczema, impetigo, and common porrigo, in that they have no inflammatory crust, only a thin branny desquamation being present. In the latter, the hairs are not destroyed, but simply matted together in the crust, while in ringworm they are broken off short. The roundness of its patches, and their abrupt definition, together with the paucity of scales, distinguished it from all the forms of psoriasis; and the latter are, besides, very rare on the scalps of children. In alopecia circumscripta the patches are glabrous, quite destitute of hair, and free from even the smallest scales. In some cases in which ringworm departs from its usual type—for instance, if attended by inflammation—its differential diagnosis becomes difficult. In all such cases, the appeal is to the microscope. To make a satisfactory diagnosis with the microscope, the hairs from the patch should be carefully pulled out with tweezers, and some of the branny scales should also be scraped off. These should be put into a drop of glycerine on the microscope-slide, and covered in the usual manner. The addition of acetic acid renders the hair-structure more transparent, and the sporules, therefore, more conspicuous; but glycerine is usually quite sufficient. After observing the general size of the hair-fragments, etc., with a half-inch object-glass, a quarter-inch, or a fifth, should be employed.

An Electuary of Guiaicum. Dr. Fernandez, a Spanish physician, recommends the following:—

℞ Gum guiaicum, ℥ss; powdered rhubarb, ʒij, gr. xl; cream of tartar, ʒvj, gr. xl; flowers of sulphur, ʒxiij, gr. xx; one nutmeg; honey, ℥xj, ʒvj, gr. xx. The dose is two teaspoonfuls morning and evening.

Weight of New-born Infants. Dr. E. von Siebold presents a table of the weights of 3000 infants (1586 male and 1414 female), weighed immediately after birth. From this table it results that by far the greater number of the children (2215) weighed between 6 and 8 pounds. From 5¾ to 6 lbs. the numbers rose from 99 to 268; and from 8 to 8¼ lbs. they fell from 226 to 67, and never rose again at any weight to 100. From 8¾ to 9¼ lbs. they sank from 61 to 8; rising, however, at 9½ lbs. to 21. Only 6 weighed 10 lbs., 1 10¾ lbs., and 2 11 lbs. The author has never but once met with a child weighing 11¾ lbs. The most frequent weight in the 3000 was 7 lbs., numbering 426. It is a remarkable fact, that until the weight of 7 lbs. the female infants exceeded the male in number, the latter thenceforward predominating. This agrees with Scanzoni's figures, who found that the weight of males in 9000 births averaged 7 lbs. ʒ ij or ʒ iij; and of female infants, 6 lbs. ʒxxviij, the female infants weighing less than 7 lbs. more frequently than the males. From these statements and those of various others writers here quoted, the conclusion may be drawn that the normal weight of a mature new-born infant is not less than 6 nor more than 8 lbs., the average weight being 6½ or 7 lbs., the smaller number referring to female, and the higher to male infants. (*Dublin Med. Press.*)

Test for Cholesterine. If cholesterine be moistened with hydrochloric or sulphuric acid containing perchloride of iron, it becomes of a magnificent violet colour. A mixture of two or three volumes of concentrated hydrochloric or sulphuric acid, and one of a dilute solution of the perchloride, will answer for the experiment, or even the ordinary commercial hydrochloric acid. A small piece of cholesterine should be rubbed by means of a glass rod with a drop of the reagent, and the mixture then gently warmed. It first becomes of a reddish, which, as the temperature rises, changes to a blue violet colour. A strong heat destroys the colour. When sulphuric acid is used, the mixture must be warmed more cautiously. It first becomes carmine red, then violet, and at a high temperature is carbonised. Nitric and phosphoric with the perchloride of iron will not give the reaction. (*Annalen d. Chem. und Pharm.*)

Treatment of Burns and Scalds by Castor-oil and Collodion. Mr. Marley has long used the following application for burns and scalds:—Pure collodion ℥ij; best castor-oil ℥j. Shake it up well, and pour it over the wound, or apply it with a feather or camel's hair brush. It is particularly well adapted for scalds, superficial burns, and general abrasions of the skin. The mode of application is as follows:—The application is dropped on, or painted all over the injury; a rag is then soaked in sweet or the best olive oil, and applied over the collodion; the latter, by its evaporation, leaves a glutinous film, like a very thin skin, wherever it has been applied, and this most effectually keeps off the air. The utility of the well-oiled rag becomes apparent in dressing the wound; if not oiled the rag would stick, and tear off the glutinous film, which, besides being very painful, would interfere with the process of reparation. (*Lond. Med. Review.*)

An Economical Military Emollient. Dr. Dechange, a Belgian military surgeon, in cases of panaris, inflammations of the hand, wrist, etc., proceeds as follows:—Into a large pig's bladder, softened with oil, the emollient, etc., application is introduced, and then the hand or foot of the patient; the orifice of the bladder is then closed. Evaporation being prevented, the poultice, etc., remains soft during several days, and may be warmed by immersing the bladder in hot water. The fingers are uncompressed. The application is very agreeable and economical.

Therapeutical Action of Solanum Dulcamara and Solanine. Professor Caylus, of Leipzig, has undertaken a series of experiments to ascertain the exact effects of dulcamara, and its active principle, solanine. These substances produce a paralysing action on the medulla oblongata, and an exciting action on the nerves. They cause death by producing paralysis of the respiratory muscular apparatus, by an action analogous to that of coneine and niotine. They possess a therapeutical action in spasms and irritable conditions of the respiratory organs in simple spasmodic cough, whooping cough, and spasmodic asthma. Their therapeutical action in certain morbid conditions of the blood—as gout, rheumatism, constitutional syphilis, and perhaps in certain chronic diseases of the skin—may be due to their augmenting the excretion of the kidneys, of the constituent parts of the blood which have undergone combustion, and not to the excitement of cutaneous activity. Solanine and dulcamara may be given without danger in inflammatory conditions of the stomach and the intestinal tube, as they exercise no action on those organs. Inflammation of the respiratory organs presents no contraindication to the employment of solanine and dulcamara, but they are contraindicated in inflammation of the kidneys. The medium dose of solanine for an adult is from one to five *centigrammes* of acetate of solanine, a substance which M. Caylus prefers to the pure alkaloid, in consequence of its solubility. The most suitable form of administration is in pills, the solution of the salts of solanine having a very disagreeable taste. The extract obtained from alcohol, and then washed with water to remove the alcohol, is preferable to the watery extract generally employed. (*Dub. Hosp. Gaz.*)

Hæmoptysis induced by Sulphate of Quinine. Four cases are recorded by M. Simon, to show that hæmoptysis may be induced by sulphate of quinine. The hæmoptysis coincided with the administration of the quinine, ceased when the medicine was suspended, returned when it was resumed, and again ceased when the remedy was discontinued. In none of the cases could any disease be discovered to account for the hæmoptysis. The dose of quinine varied from six to twenty five grains in the day. (*Dublin Med. Press.*)

Gargle for Diphtheria. Dr. Faulkner recommends the following:—Pyroligneous acid and water, equal parts; chlorate of potash, as much as will dissolve; honey enough to sweeten well; to be used two or three times a day. In very bad cases, when the whole fauces are covered over with the diphtheritic exudation, he omits the water, and only uses a little more honey with the acid. (*Maryland and Virg. Med. Jour.*)

Phosphorated Oil. Dr. Metzel employs the following preparation in scabies. Eight grammes of phosphorus are introduced into 500 grammes of olive or linseed oil. The bottle closed with bladder, and exposed in a bath to 212° Fahr. The oil must then be kept in well-closed vessels. It is to be rubbed in daily. About four applications suffice for a cure. It does not cause, but cures any coexisting eczema or excoriations. The dregs of the bottle must be avoided.

Liniment for Chilblains. Mr. Garretson of Philadelphia recommends the following formula, which he has used "with really remarkable success":—Persulphate of iron (Monsel's solution), ʒ i; tincture of iodine and soap liniment, of each ℥i. The quantity of each article is to be directed, of course, by the indications of each particular case. Before applying the liniment, which may be painted with a brush, or applied by wrapping up the toes with saturated raw cotton, the feet are to be held for two or three minutes in cold water, and next rubbed into a glow with a coarse towel.

British Medical Journal.

SATURDAY, MAY 4th, 1861.

THE DIFFERENCE BETWEEN A MAN AND A MONKEY.

A writer commenting, in a daily periodical, upon the Huxley-Owen controversy relative to the position of man in the creation, makes the following (as they seem to us) very pertinent remarks:—

> "Is it not far more 'orthodox' to discard such trifling considerations, and seek the true characteristics of our race in those *mental* attributes by virtue of which man towers so high above his inferior companions on earth? Is not the power to write the name of his Maker a more obvious distinction than the 'opposable thumb' with which he holds his pen to perform the act? Are not the mental qualities that enable him to appreciate the beneficence of that Maker far more important attributes of his nature than any trifling peculiarity in the temporary and perishable organ by which his mind operates?"

The writer had in his thought what, we should fancy, most of us must have had, in reflecting on the aforesaid controversy—the conviction that there must be some better sign of distinction between man and other animals, than greater or less bits of cerebrum, or more or less of *hippocampi minores* or of *cornua posteriora* of the ventricle.

We are glad to see that this *better* sign has been beautifully worked out by a distinguished naturalist; and we think that many of our readers will thank us for explaining how he has done it, and for relieving them, in a very comprehensible way, of the stigma of a gorilla-parentage or monkey-relationship, with which their imagination may have uncomfortably invested them, thanks to the differentiating and assimilating talents of Mr. Huxley.

M. Quatrefages* examines man *as a specimen*, as he would any other object of creation, animal or vegetable. He takes him in hand simply as a dissecting naturalist; and conning over the characters of the specimen, he has satisfied himself that man has never yet been properly classified in the archives of the *Règne Animal*; he, therefore, resolved to do the lord of creation justice.

The question has long been agitated: Is man an animal? and, if so, what place does he occupy in the scale of animated beings? Very diverse have been the answers given to this question. He has been made to form a special kingdom; a division of the animal kingdom; a class; an order; a sub-order; a family; a sub-family; a genus; and a simple species, wherein he has been brought into close relation with a monkey.

The opinion of M. Quatrefages is this: that man differs from animals as much as animals differ from vegetables; and he, therefore, creates a special kingdom, the *hominal*, or the human kingdom, in which to place him.

To justify this proposition, it is necessary for him to show that there exists in man a series of phenomena completely distinct in kind from those which are found in animals. Where do we find these differentiating phenomena? Not in his structure, surely. Comparative anatomy and physiology, aided by chemistry and the microscope, have long decided this much. Those sciences have shown that there is the same play of organs and of vital actions in dogs, and rabbits, and frogs, as there is in man.

Some naturalists have turned their minds to Ovid's description of man, in the final lines of his account of the creation.

> "Sanctius his animal, mentisque capacius altæ
> Deerat adhuc, et quod dominari in cætera possit.
> Natus homo est: illum mundi melioris origo
> Finxit in effigiem moderantûm cuncta Deorum:
> Pronaque cùm spectent animalia cætera terram,
> Os homini sublime dedit, cœlumque tueri
> Jussit, et erectos ad sidera tollere vultus."

The description of the erect position—the *os sublime*—has been taken as the exterior mark of man. But M. Isidore Geoffroy St. Hilaire has noticed under this head a fact, which has, curiously enough, escaped all his predecessors; namely, that many birds have this erect carriage of their personalities. Penguins and a certain simple race of ducks present this peculiarity. And, moreover, as regards mere attitude, the difference between man and animals is, after all, only a matter of degree. Most of the mammifers have a demi-horizontal station; but that of the anthropomorphous monkeys is naturally oblique. So that man has only, in this respect, advanced a little further in a direction clearly indicated by animals.

But Ovid had plainly in view the mental superiority of man. He was, he says, to be an animal "*mentis capacius altæ*" than the rest. Can we find in man any distinction in respect of mental faculties? An animal thinks, wills, remembers, and reasons; and the correctness of his judgment is sometimes surprising. Moreover, between different animals, we find extreme differences in this respect. Then, as regards the *voice*—the highest manifestation of intelligence—it is true, that man alone possesses the power of articulate language; but two classes of animals have a voice. Accents of anger, of pleasure, of pain, of alarm, etc., are all clearly distinguished by the observer of the habits of animals; and though the voice which expresses them be very rudimentary, still it suffices for the purposes of the beings which use it; and, indeed, differs from the human voice only in degree. Here, in man, as in the other cases mentioned, there is an immensely greater approach towards perfection, but nothing essentially new or characteristic.

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* M. Quatrefages' views, which are here given, have been published in the *Revue des Deux Mondes*.

Moreover, the faculties which belong to the instinct and intelligence, are manifested in animals as well as in men. Animals love and hate. Perhaps, indeed, it is by these particular characters that man and animals most nearly approach each other.

Where, then, are we to search for this *something*, which makes man to differ so totally from animals, and which requires his classification in a natural kingdom apart from them? We find it neither in the organic nor in the intellectual parts of his composition. Let us, then, and still investigating simply as naturalists, examine his moral qualities.

Here, at once, we discover fundamental distinctions. In every human society—amongst savages—even amongst the very lowest races of human beings—we find existing an abstract knowledge of right and wrong, of good and evil. Herein must we seek the prime characteristic of the human race. This faculty, M. Quatrefages distinguishes by the appellation *morality*, just in the same way as he would call the faculty of perceiving sensations *sensibility*. More than this: wherever on the earth men have been found to exist, there has also been found a belief in a state of existence beyond the present. The notion of a divinity, and of another life, is as widely spread amongst every human race, as is a belief in good and evil. However vague or infantile this notion may be in its manifestations, never yet has a nation or a people been visited by travellers with whom it was not found in action. But nothing analogous has ever been noted amongst animals. Herein, then, we have a second characteristic of man, which M. Quatrefages distinguishes by the term *Religiosité*. The moral and religious sentiments, then, are universal attributes of the human race, and they are totally absent in animals.

To follow out the philosophic method based on these facts, let us see next how man must be classified in the scale of animated beings. Linnæus has defined vegetables as organised, non-sentient living beings; animals, he says, are organised living beings, which feel and possess voluntary motion. To follow out Linnæus's method, and the definition of man, his special character in zoology would be as follows:—*Man is a body, or better, an organised being, living and sentient, possessed of voluntary movement, and endowed with morality and religious sentiment.*

M. Quatrefages sums up his position as follows: Man is, like brute matter, subjected to physico-chemical forces. He has an organised frame, like vegetables and animals. Like animals, he is sentient, and possesses voluntary movement. In his material being, therefore, he is nothing more than an animal, more perfect in some respects, and much less perfect in others, than various species of animals. His intelligence, much more complete, and incomparably more developed, elevates him infinitely above animals, but does not separate him from them. If, then, he be a being distinct from animals, it is because he possesses different faculties from them. Such faculties he does possess; and the conclusion, therefore, to which the method of the naturalist forces us is this: that he must be placed in a natural kingdom of his own, the human kingdom.

"If," adds M. Quatrefages, "I am not mistaken, there is something in these results which, independently of the scientific conclusions they lead to, will find an echo in our highest aspirations. Man loves to proclaim himself the legitimate sovereign of all things on the surface of the earth—that he is monarch of all he surveys. Is it not then satisfactory to find, that his anthropological characters sanction and ennoble this sovereignty in placing, by the side of the notion of might which springs from his intellectual superiority, the notion of duty which flows from his *Moralité* and *Religiosité*?"

THE WEEK.

At another page of the Journal will be found a letter from Dr. Thorburn of Manchester, in which he tells of "the unkind and ungenerous treatment of Mr. Roberton by the Manchester Medico-Ethical Association", and of "his surprise at seeing Mr. Roberton made to point a moral in these pages". Now, with regard to the treatment of Mr. Roberton by the aforesaid Society, we have nothing whatever to do. In publishing the correspondence which was forwarded us for publication, we did simply that which it was a matter of course to do. As to the surprise of Dr. Thorburn, we would say that we think it might have been more fairly called for in this matter if we had passed the whole thing over without notice. Our business was with the principle affirmed by the Society; and we were glad of an opportunity of publicly giving our adhesion to that principle, for we verily believe that there never was a time when its general recognition was more urgently called for. We never alluded by name to Mr. Roberton in our remarks; and, if it be any satisfaction to Dr. Thorburn, we will add, that the offenders in this kind, who were in our mind's eye when we penned those remarks, were men of far higher professional mark and notability than Mr. Roberton, and men with whom the offence is a daily practice. We trust that Dr. Thorburn's letter will satisfy Mr. Roberton's friends. Whether it really throws any fresh light on the case, is a point which we will leave others to judge. We again repeat, that we had nothing whatever to do with the *facts* of the case. A large and influential society stated that one of its body had offended against a principle, *which we all admit to be a righteous principle*. We were bound to admit that their conclusion was just, but yet are still most glad to rectify any injustice which may have been thereby done to an individual, and therefore publish Dr. Thorburn's letter.

What constitutes a live birth? Scientific men are not yet at one on this question, if we may judge from the report of a case which was tried on Monday last, before Vice-Chancellor Sir John Stuart. On the one side, it was asserted that a certain child was born alive; and the evidence adduced in support of this view was that of the practitioner who had attended the mother in her confinement, and who had observed a pulsation in the umbilical cord at the time of birth. Drs. Taylor and Tyler Smith held that this phenomenon was in itself a sufficient indication of life; while Drs. Lee and Ramsbotham expressed their belief that there was a distinction between intrauterine and extrauterine life, and that without respiration a child could not be said to be born alive. The Vice-Chancellor determined that the child was born alive: grounding his decision on the positive evidence of the performance of even one function (circulation), in preference to the negative and unproven opinion of Drs. Lee and Ramsbotham that another (respiration) had not taken place, because, unless there were proof of the performance of three functions essential to vitality, there was no proof that vitality existed. The Vice-Chancellor's decision was, we think, in perfect accordance with science; and we must confess ourselves utterly unable to appreciate the distinction laid down by Drs. Lee and Ramsbotham between intrauterine and extrauterine life. As far as we can see, life—*i.e.*, vegetative life—is the same thing everywhere; and, if the doctrine of these experts be correct, then the child *in utero* is not alive, the production of abortion is not a criminal act, and doubts as to the morality of certain obstetric proceedings in difficult cases need no longer trouble the conscience of the accoucheur.

Mr. Richard Hughes, who designates himself as a "homœopathic practitioner," objects to us, that we call "us," *i.e.* homœopaths, globulists.

> "If," he writes, "you wish another name besides homœopathists, call us similists, specificists, monopharmists, minimists, as you please. But, as you desire truth and fairness, do not call us globulists. I would," he continues, "ask you to insert this letter in the British Medical Journal; but that I fear the rule *audi alteram partem* is not considered to apply to homœopathy."

Mr. Hughes is quite right in his conclusion that we refuse *audire alteram partem* in the matter of homœopathy. We have something else better to employ our time about, than chop logic over this phantom of human folly. We should as soon think of discussing the quadrature of the circle, the flying Dutchman, or the cheesy composition of the moon. Men of business cannot be all their lives occupied in the laying of Cock-lane ghosts. We may be very sure that so long as human nature is well-stocked with credulity, there will never be wanting a goodly supply of *gobemouche* food. Matters of credulity are, we need hardly add, beyond the pale of argument; and so, therefore, is this particular matter, this "specificity" of Mr. Hughes.

The Vice-Chancellor has decided, in most unmistakeable terms, that in his opinion the College of Physicians of London is simply exercising its legal rights in issuing licenses to practitioners of medicine to enable them to dispense medicines to their patients. Without calling upon counsel for the College to reply to the arguments of counsel for Apothecaries' Hall, the Vice-Chancellor delivered himself of the following judgment: the whole gist of the dispute will be found in it.

> "The real question was how far the design of the defendants was a fraud upon the legislature, and how far they were precluded from altering their own by-laws. Their original charter admitted the whole domain of physic within its purview. Not only 'physic,' but surgery was included, and its effect was to throw the universal medical science under the control of the College of Physicians. Up to the 15th of James I, no one could have disputed the right of the College to deal with the question of selling medicines, and to revoke any by-laws made by them upon the subject. No doubt, considerable inconvenience was occasioned to the public from the restriction, and this gave rise to the apothecaries and their incorporation by James I. It could not be maintained for an instant that this charter had in any way interfered with the privileges of the College of Physicians. From the time of Henry VIII down to 1815, it was not possible to suggest a doubt that the College might have relaxed any of their by-laws, including that which restricted the sale of drugs. Then came the Apothecaries Act of 1815. It was contended that the saving clause (sec. 20) did not preserve to the College the right, which existed before the Act, of granting licenses to practise physic divested of the restriction contained in their by-laws. To say the least, the matter was far too doubtful to induce the Court to restrain a public body acting *bonâ fide* and in the belief that they were not exceeding their functions, nor was it clear that this Court was the medium through which a solution of the question could be properly obtained. There was no express repeal of the privileges of the College of Physicians, but, on the contrary, an express saving; and, unless the two things were so absolutely inconsistent that one of them must of necessity be excluded, he could not come to the conclusion that the privileges vested in the College were abrogated by section 20 of the Apothecaries' Act. His Honour proceeded to consider the Medical Act of 1858. Until 1858 it was clear that the College had full power to create a new body; and if it were necessary to determine the question upon this ground, he thought that the Act of that year did not abrogate such right. There was not a *scintilla* of evidence on the face of the Act of an intention to deprive any one of the medical bodies of their power to alter their by-laws, so long as they kept within the limits of their charter. If he were to import into the case the knowledge possessed by the legislature, all that could be assumed would be a knowledge of the exact state of things then existing; and Parliament must be taken to have known that by-laws could always be altered by the bodies who had made them. The

question, however, returned to this:—Had the defendants authority to do this act? The information did not state that this new body would be apothecaries, but 'to some extent a class of apothecaries'. Assuming, for the moment, that the plaintiffs would have a right of action against these new licentiates, who took their licenses with knowledge of the Act of 1815, still the College of Physicians would not degrade their licentiates for selling drugs, and the worst that would happen would be that they might have to obtain the certificate from the Society of Apothecaries. As to the argument of public injury arising from the harm done to these young men who accepted the licenses from the College, and were consequently deceived, he confessed that he did not attribute much weight to it. The legal maxim, '*Volenti non fit injuria*,' would apply to such a case. Upon these grounds, the demurrer must be allowed; and it was not a case in which any good could be done by granting leave to amend."

From this, it appears that if Apothecaries' Hall are determined to carry this matter further, they must prosecute one of the licentiates of the College caught in the act of practising as an apothecary.

The Council of the Obstetrical Society has, we hear, unanimously determined not to enter into any combination with different medical societies, of the sort suggested by the Medical and Chirurgical Society. The Pathological Society's Council have not yet decided what steps they will take in reference to the communication made to them from the Medical and Chirurgical Society in reference to this matter. No society has, we believe, yet "gone for the union".

Lord Ebury (whom we last week had occasion to refer to, on account of the highly *respectable* opinion which he had expressed of doctors' professional motives of action) on Tuesday last presided at the London Homœopathic Hospital. The fact is very satisfactory; for, as we then suspected, he must have been very unfortunate in his medical connections to have picked up such an idea of medical honour. With regard to the institution over which he presided, we may remark that its report is not flourishing, annual receipts being £1200, and expenditure £1700. The excess of expenditure has been met, in part, by drawing on future prospects.

Only 1200 (!) lbs. of rotten meat were seized in the City last week—a fact which proves the use of a vigilant police and a few prosecutions. During the last thirteen weeks, the average amount seized was 4400 lbs.

About one thousand pounds sterling have been collected for the erection of statues to Lapeyronie and Barthez.—Professor Baader of Soleure, who died recently, has left all his fortune to the Lunatic Asylum of Rosegg.—Professor Csauss of Pesth has also left large sums to the Faculty of Medicine, the Children's Hospital, and the Hungarian Academy.—The medical officers of the Wieden Hospital of Vienna have entered a collective complaint against the Sœurs de la Misericorde, who have had the charge of their patients; the consequence has been an investigation, whose results are deplorable.—The *Union Médicale* says: "In future, in Austria, the clergyman of the parish in which a suicide occurs is to take charge of the medico-legal report, and will have a deliberative voice in the commission charged to pronounce concerning the responsibility of the deceased!"—Some of our honourable brethren, says the *Moniteur des Sciences*, have thought it necessary to undertake the proof of the imposition and bad faith of syphilisation. The trouble is praiseworthy, but useless, and perhaps even hurtful. We say hurtful, because syphilisation, if left to its natural course, will probably one day or other pass over to the Gulf of Mexico; and thereby Europe, and France especially, will be delivered from it. Happily, it does not commit any extensive ravages in France.—M. Cusco has related to the Medical Society of Paris what he believes to be the first successful case which has occurred in France of recovery from complete blindness after the operation of iridectomy. The patient had lost one eye seven years ago, and the other presented that greenish aspect which of itself characterises glaucoma with the aid of the ophthalmoscope. The vision of this eye had rapidly diminished during the last three weeks; but the patient could still distinguish night from day, and see large objects. When M. Cusco first saw the patient, three weeks later, the blindness was complete. He thereupon performed the operation of iridectomy on the patient; no inflammation followed; and, in the course of a few days, the patient could distinguish the hand of the surgeon. Light was gradually admitted into the room, and the sight became clearer. The patient could distinguish objects shown him.—M. Sperino has been called on to occupy himself in a sanitary reform much required in Naples—the diminution of syphilis. A dispensary for the gratuitous treatment of syphilitic patients has been opened in Lisbon; and it is said that its good effects were at once noticed in the garrison.—Dr. Martinelli of Milan has died at the age of 46, in consequence of a poisoned wound of the thumb, received in making a judicial *post mortem* examination of the body of a man who had died of gangrene following gunshot-wound.—Professor Palasciano has founded an annual prize of 100 ducats in the Pontaniana Academy, in memory of the proclamation of the newly united Italian kingdom.—The number of professorial chairs in the medico-chirurgical department of the University of Naples has been increased to twenty-three, with assistants. The fees are only about 65 *francs* a month; and the *Union Médicale* suggests that it would be better to diminish the number of chairs and increase the remuneration.—M. de Renzi has been nominated Professor of the History of Medicine in the University of Naples.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

PHILIP H. WILLIAMS, M.D., *General Secretary.*
Worcester, March 27th, 1861.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
SOUTH-EASTERN. Annual.	Crystal Palace.	Wed., May 8, 3 P.M.

LANCASHIRE AND CHESHIRE BRANCH.

THE Twenty-fifth Annual Meeting of this Branch will be held at Liverpool, on Wednesday, June 5, under the presidency of EDWARD BATTY, Esq.

Gentlemen who intend to read papers, are requested to send notice to the Honorary Secretary as early as possible.

A. T. H. WATERS, M.R.C.P., *Hon. Sec.*
Liverpool, May 1st, 1861.

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, APRIL 23RD, 1861.

B. G. BABINGTON, M.D., F.R.S., President, in the Chair.

ON A PREVIOUSLY UNOBSERVED PREVENTABLE CAUSE OF IDIOCY, IMBECILITY, AND THE ALLIED AFFECTIONS.

BY THOMAS BALLARD, ESQ.

IDIOCY is neither limited to locality nor to any rank of society. The two most recent writers on the subject—Dr. Howe of Massachusetts, and Dr. Morel of Rouen—attribute it to certain defects, either moral or physical, on the part of the parents; but neither of these theories, nor the more popular one of intermarriage with near relations, seems to afford a satisfactory explanation of its production.

Dr. Guggenbühl, whose experience at the Abendberg is said to have rendered him the greatest existing authority on the subject, has stated the result of his observations to be "that the debased mental and physical condition termed cretinism consists in an affection of the cerebro-spinal system—most probably cerebral œdema; and is associated with rickets, hydrocephalus, and other scrofulous manifestations." He denies the hereditary tendency to it, and regards it as exclusively a local phenomenon, fostered by certain exciting causes which are in operation during the first three years of life; but seems not to have ascertained what these causes are.

Mr. BALLARD had arrived at similar conclusions respecting the interdependence of these various morbid phenomena; the object of the present communication being to direct attention to the cause which he believes to be principally engaged in producing them. In a work which he had recently published, entitled *A New and Rational Explanation of the Diseases peculiar to Infants and Mothers*, it was shown that "the exercise of the instinctive act of sucking under circumstances unfavourable to the infant obtaining food is a principal source of disease to infants and puerperal women;" and the result of this fruitless sucking being an excessive reflex secretion of gastric and intestinal juices, which corrode and soften the mucous coat of the intestinal canal, thus severely injuring the digestive powers, and consequently preventing the proper growth and nutrition of the various tissues of the body. The frequent and green stools which sucking infants so frequently are the subjects of are the evidence of this process of injury to the intestinal canal being in operation. And thus fruitless sucking becomes the chief cause of the developmental diseases of infants and children, and especially of the very pathological conditions which Dr. Guggenbühl has observed to be associated with cretinism.

The author had observed that idiocy is a condition involving many of these morbid phenomena. The histories of all the cases were similar. They had suffered in infancy persistent diarrhœa, succeeded by fits or some form of convulsive disease. A large majority of them are evidence of long-continued habits of fruitless sucking in the deformity of the jaws, which was caused by some portion of the hand being placed in the mouth for the purpose of sucking it at a period of life when the bones were soft enough to yield to its pressure. The upper jaw was either forced forward, thus causing the upper teeth to project; or the lower jaw was drawn forward in advance of the upper, constituting the deformity known as "underhung." Sometimes the jaws were not deformed, yet the condition of idiocy was extreme: in such cases either the whole mischief had occurred very early in life, so as to blight the growth of the brain, thus producing an idiot with a small head; or the habit of fruitless sucking had been continued under the form of "tongue-sucking." These latter cases add, in the author's opinion, much weight to the present explanation, because the effect upon the intestinal canal was still maintained, the subjects of it having loose evacuations from the bowels, particularly during the night, and the habit being especially practised when in bed. They constituted many of the "dirty patients" in asylums. In addition to the deformity of the jaws, the defective condition of the incisor teeth was another evidence of fruitless sucking stamped upon the idiot; it resulted from the irritation to which the corresponding portion of the mucous membrane of the mouth is subjected during their development.

The sources of fruitless sucking to which infants were very frequently subjected, and from which the retained habits above mentioned are acquired, were three in number—namely,

1. The mother's breast, when it does not yield as much milk as the infant requires.
2. The "sugar-teat," which is frequently placed in the child's mouth by the nurse to keep it quiet. This is probably much practised on the Continent, where idiocy is very common.
3. The prevalent custom of feeding infants through artificial teats, which collapse under the pressure which is necessarily exercised upon them in the act of sucking.

The author then repeated his conviction, that the various forms of convulsive disorders of infants are not dependent upon eccentric causes—such as teething and worms, but that they are really the evidence of cerebral disease, in all probability some degree of œdema, giving rise to congestion and pressure; and that their treatment by hot baths, emetics, purgatives, lancing the gums, etc., is not the most conducive to a perfect recovery. The only effectual mode of treatment is to abstract blood, either by leeches applied to the temple, or from the external jugular vein by venesection, according to the urgency of the symptoms. To the neglect of this plan of treatment many cases of idiocy and of death are attributable. If fruitless sucking is arrested, and the head symptoms are thus treated, cases of threatened idiocy may be averted. The most important indication for the abstraction of blood is the occurrence of vomiting, especially during sleep; much mischief occurs to children, and many feeble intellects result, from the wrong interpretation of this symptom. The fundamental and most important point is to direct the attention of parents to the *mode* of administration of food. The kind of food best adapted for infants is sufficiently obvious. If the infant can obtain its food without excessive sucking, it is not subject to diarrhœa, growth and development progress properly, fits and convulsions do not occur, and habits of fruitless sucking are not acquired. The author believed that if this point could be generally understood, not only would the Registrar-General's reports show a great diminution of infantile mortality, but the physical and mental development of future generations would be much improved.

Some plaster models of mouths were exhibited to illustrate the deformities alluded to; and twenty cases bearing on the various points touched upon in the paper, were given in detail.

MEDICAL SOCIETY OF LONDON.

Monday, April 22nd, 1861.

William Coulson, Esq., President, in the Chair.

PROGRESSIVE MUSCULAR ATROPHY. BY E. SYMES THOMPSON, M.D.

During the last three or four years several cases of progressive muscular atrophy had come under Dr. Thompson's notice; and of these he gave some details. He then went on to notice the etiology of the disease. In many cases it is to be traced to overstraining of the muscles; but this is not always the case. In some instances, wasting of single muscles has been observed; Dr. Roberts of Manchester has described a case of the kind. *Scribe-palsy*, common in Germany and sometimes seen in England, is another form; it is different from writer's cramp. Inability to use the hand in writing gradually comes on. It seems probable that overwork brings about wasting of the muscles, and loss of strength. Dr. Thompson had seen a case in which this condition was brought about by excessive gymnastic exercise. Wasting palsy affects muscle naturally associated in action, though supplied by different nerves and muscles.

The origin of the disease was then discussed. Were the spinal cord the peccant part, we should find some indication present, in distortion of the spine or in pain over this part. Besides, there ought to be considerable disturbance of the antero-lateral columns, producing loss of action of many groups of muscles. Does it arise in the anterior roots of the spinal nerves? This hypothesis is neither necessary nor sufficient. Nor is it tenable, that the disease arises in the course of the nerves; nor that the sympathetic supplying the vessels is interfered with. And, if it depended on disease of the arteries, it is difficult to see why the muscles alone should be involved. The author believed wasting palsy to be a blood-disease; somewhat, but not altogether, analogous to lead-palsy. But in the latter, the nervous system is also affected.

In children, fatty degeneration of muscle is sometimes met with, attended with increase in bulk. In the adult, wasting of the muscle is present from the first.

As muscle wastes, its electro-motive power is weakened.

In the diagnosis, we may have a difficulty in distinguishing the disease from infantile paralysis; but the history will explain the case. It is most apt to be confounded with paralysis from metallic poisoning; but here the history and the constant tremors will give the diagnosis. In the early stages of lead-palsy, the flexors are unaffected. Progressive muscular atrophy also requires to be diagnosed from paralysis after febrile diseases, and from the results of pressure on the nerves, or of diseases of the spinal cord.

In the treatment, care must be taken not to subject the muscles to much exertion: but Dr. Thompson believed that gentle exercise, even passive, had a beneficial effect. Galvanism should be applied with the view of improving the condition both of the muscles and of the nerves: and the method of Duchenne and Althaus should be followed. Faradisation, or the use of the interrupted current, is the most useful plan. Iron is generally indicated; and strychnine is generally useful both in action on the muscles and on the internal organs. It should be given in doses of from the one-thirtieth to the one-fortieth of a grain, and may be continued several years. In syphilitic constitutions, iodide of potassium must be given. Several mineral waters, especially those of Buxton and Aix-la-Chapelle, have been found beneficial.

Dr. Althaus had seen a considerable number of cases of wasting palsy, most of which had been treated as rheumatism or gout, or as peripheral paralysis. He believed the disease to be one of the blood. He thought Dr. Thompson had not laid sufficient stress on the difference between the partial and the general forms. The partial form is almost always confined to the upper limb, and is not fatal; the general form begins in the lower extremities, and gradually invades the whole body except the muscles of the eyelids and of mastication; and almost always destroys the patient. At the same time, the general form may, in rare cases, begin in the upper extremities. Of the causes we know but little. The disease has been attributed to cold; but without sufficient evidence. As to the treatment, the results have hitherto been unsatisfactory. He (Dr. Althaus) had given strychnine, but could not say that he had observed benefit from it. He trusted more to steel and quinine. In his last two cases he had given phosphate of soda and chloride of potassium, with such result as to encourage him to repeat the trial. The electric stimulus is of the highest importance. Until lately he had employed Faradisation with much benefit; but this process does not increase the nutrition of the muscle. He, therefore, had lately applied the continuous current by Bunsen's chain; this causes dilatation of the blood-vessels, and even increased flow of blood. He believed that, with regard to exercise, the progressive muscular atrophy differed from other forms of paralysis, in some of which a cure may be effected by exercise, while in muscular atrophy motion only accelerates the wasting of the muscular tissue.

Dr. Brown-Séquard was always anxious when he heard a new hypothesis proposed for which he could not see the grounds. There was, as far as he heard, no proof of Dr. Thompson's hypothesis of the disease depending on a poison in the blood. He would like to hear, both from Dr. Thompson and Dr. Althaus, on what this opinion was grounded.

Dr. Salter thought that in the cases described by him, the author included three kinds of atrophy—one apparently dependent on a special blood-condition; one arising from over-exertion; and one dependent on disease of the muscle. The last two forms are evidently primarily and physiologically muscular. He thought that strong reason in favour of a blood-origin was afforded in the hereditary nature of the disease, and in the symmetry with which it attacks the muscles on the two sides, just as occurs in skin-diseases. But one would not expect that, in inherited symmetrical atrophy, muscles physiologically related should be affected so much as those nutritively related. The other two classes of cases clearly pointed to derangement of the function of the muscle, either from excess or from reduction. He had observed that if, from want of use, a muscle has gone on to waste to a certain point, the wasting goes on irrecoverably. He had always looked on some atrophies as arising from local poisoning; of this he had seen a form in compositors, affecting the right thumb. This might, however, arise from the constant use of this part. Again, in lead-poisoning, while many of the phenomena doubtless depend on blood-poisoning, may not the wrist-drop be connected with the direct application of the lead to the hand?

Dr. Brown-Séquard said that, if hereditariness were a proof of blood-origin, he did not know what diseases might not be regarded as having their primary seat in the blood.

HARVEIAN SOCIETY OF LONDON.

Thursday, April 18th, 1861.

E. H. Sieveking, M.D., President, in the Chair.

SOME OF THE AFFECTIONS DEPENDING APPARENTLY UPON DISEASED CONDITIONS OF THE TEETH.

BY E. SERCOMBE, ESQ.

Mr. Sercombe commenced by expressing his conviction that a more extended knowledge of the teeth in a state of health and disease than that generally possessed by the physician was incumbent upon him. He referred to the importance attached to these organs by John Hunter and other great men in the profession, and expressed his astonishment that men could be found in the present day who almost made it a boast that they knew nothing about the teeth. It was not necessary that the medical man should be able to perform the various operations on the teeth, but he should know so much of the teeth as to be able to say whether a given tooth which might not be the seat of toothache was nevertheless a source of irritation to its neighbourhood or to more remote parts. He laid great stress upon the fact that, when a tooth is the cause of irritation in a remote part, it rarely if ever had pain localised in it; and hence the man whose acquaintance with the teeth was scarcely more extended than was that of the general public often allowed teeth to retain their places, which a more intelligent examination of these organs would have led him to condemn.

Mr. Sercombe spoke of cranial neuralgia and facial neuralgia, of persistent headaches, of flushing of the face, of lock-jaw, and of prolonged conjunctivitis, as affections which he had himself found to disappear upon the extraction of diseased teeth. He related two cases of cranial neuralgia, in both of which the pain was never referred by the sufferers to their teeth, but described as always located in the vertex. In both of these cases, the patients' descriptions of their sufferings were strikingly alike; they both spoke of a feeling of a great weight, "as if an animal" were always sitting there, which, when the attack was about to come on, appeared to creep down the side of the head to the ear, in the centre of which the acute pain was always located. Both of these cases had been of some years standing, both were immediately cured by the extraction of diseased teeth, and both remain cured after an interval of some years.

He gave also a case of facial neuralgia of thirteen years standing. In this case, the affection was confined to the infra-orbital foramen. The lady in whom it occurred had had the benefit of the advice of some of the leading men in London without substantial relief. This case was cured permanently by the extraction of a wisdom tooth, which, though perfectly free from caries, was the seat of exostosis. Numerous other cases which had occurred in his practice were related, and besides these, the attention of the meeting was drawn to the affections reported by Mr. Hancock in the *Lancet*, and by other observers elsewhere.

The condition of the tooth which he (Mr. Sercombe) had observed to be most frequently connected with cases of remote irritation was that of chronic periosteal inflammation and its result—exostosis; and to this affection, and especially to exostosis, he drew attention.

He then related a case of epilepsy, which had occurred a few days before to a fellow-volunteer while on parade, and of which, in consequence of no doctor being on the ground, he took charge. It occurred in the person of a young man of twenty-four, who had had three previous attacks, at intervals of about a year each. The case was one clearly of eccentric epilepsy, but no one of the ordinary exciting causes could be discovered; but upon examining the mouth the following day, the teeth were found to be very much crowded together; three of the wisdom teeth were through the gums, but from the smallness of the jaw, they had been forced into most irregular positions; but the fourth wisdom tooth had not yet found its way through the gum, nor did it appear possible for it to do so from want of room. Without wishing to pronounce this state of the teeth as the exciting cause of the attack, he ventured to throw it out as a suggestion. At the same time, he drew attention to the remarkable coincidence that the period of life most fruitful in epilepsy was that at which the second and third molars are being developed through their bony crypts and through the gum; and suggested that as, according to the tables published by the learned President, a large proportion of the cases occurring at this period of life were produced by causes which, with the most careful examination on the part of the physician, could not be discovered, it would not be well to bear in mind the condition of the teeth, and examine them to ascertain whether any had yet to pass through the gums.

Correspondence.

ON CHLOROFORM AND ETHER ACCIDENTS; AND GLAUCOMA.

Letter from Charles Kidd, M.D.

Sir,—A case of death from chloroform, one of the most terrifying and melancholy I have ever read, has occurred in America, and appears in one of the provincial journals which has reached me from the opposite side of the Atlantic. I say melancholy; for, with our now advanced information in Europe in these accidents, I am almost certain that the man's life would have been saved, if the occurrence had happened in Paris or in Edinburgh.

It is melancholy in another point of view, as showing how the erroneous teaching of half a dozen years ago in London medical journals is now misleading practitioners in the country parts of America, and demonstrating how careful we ought to be in dogmatising that any particular thing can or can not take place under this inscrutable agent, chloroform.

The man operated on is described as having been a perfect model of health. The operation was the simple one for glaucoma. My experienced friend Mr. Lawson assured us recently that no mischief could, would, or should arise in such eye-cases; but Mr. Hancock thought otherwise. At Moorfields, I am almost sure the man would have been saved; but in Cincinnati the description of what happened is to me peculiarly saddening, as so full of errors. We are first told of half an hour! expended placing the poor man fully under the anæsthetic (a minimum dose, as Dr. Sansom would recommend); then sickness, and the "anterior chamber of the eye just opened, filling with blood"; a sudden fit and gasping, etc.; and then what? A crowd got round, and the Marshall Hall plan was vigorously tried. The man showed no signs of respiration, life, or consciousness. He was rubbed with *ice* (the directions for those taken out of the Serpentine). His pulse, however, continued good for a half-hour under this treatment; but, as one can easily see, this *nimia diligentia* hurried him to his grave. He became stone cold; the heart flickered; the bleeding of the eye was noticed even to stop—he was irrecoverably dead, the pulse and heart beating vigorously to the last!

This case is perhaps one of the most instructive that has ever been published; yet it is omitted in the other journals. It is the entire history of these cases in a nutshell—the strong muscular man; the plunging and excitement; the trivial operation; the Marshall Hall rotations, so useless; the absence of fresh air; the pulse beating after the medulla oblongata and respiration had been paralysed; etc. The case has also an important bearing on the controversy between Mr. Hancock and Mr. Bowman. It appears to me to be one of the most remarkable deaths that have ever occurred, and, as such, to deserve a place in your Journal.

I am, etc. Charles Kidd.

Sackville Street, April 20th.

P.S. The freedom from danger of ether, as compared to chloroform, has excited a great deal of controversy in America, Italy, and Australia; so much so that a deputation or committee to Europe has been organised in America to examine into the alleged fatality of chloroform. A paper appeared some time since in the *Medico-Chirurgical Review*, maintaining stoutly that no accidents had occurred from ether. I protested strongly at the time against this paper, and offered to show Dr. Hayward, but in vain, what I have copied in my book; viz., nineteen deaths from ether described by Trousseau, five by M. Scoutetten, two referred to by Snow obscurely (one of which was a death so early as 1831—a servant of a druggist, killed by vapours of ether). If I had time to look through the foreign journals, I have little doubt I could find half as many more; for it must be remembered that ether is not used to any extent in England. I was working at the subject, as hospital reporter of a leading journal, when a young man, a practising barrister, who could say something brilliant for ether and the "Marshall Hall plan" of recovery, was put in my place. As Lord Palmerston said to Mr. Rowcliffe, the man might draw on his imagination for his facts, something like Dr. Hayward; but, so as the popular mind kept in the old routine, all was right. My esteemed friend Mr. Erichsen has apparently read Dr. Hayward's paper; but I would strongly recommend him to get Scoutetten's essay, and he will soon revise his verdict on ether.

THE MEDICAL PRACTITIONER AND THE HOMŒOPATH.

Letter from John Barclay, M.D.

Sir,—I think it may strengthen the hands of those who resolve not to tamper in any way with quackery, nor to encourage or sanction those who do, to know how cordially their conduct is approved by the profession at large. In Leicester, the medical body is very happily united, freer from jealousies and quarrels, I should say, than any other town of a similar size. This I hold to be the result of frequent meetings, convivial as well as business, in connexion with the Association; but chiefly those of the Medical Book Society, established in 1825. To this almost all the practitioners in the town belong, and it has always been the rallying-point for professional honour.

In 1852, this Society resolved unanimously, "That the Society views with satisfaction the declarations of several professional bodies against homœopathy; and pledges its members alike to repudiate the nonsensical doctrines of Hahnemann and of Priesznitz, and to decline consultation with those who profess such deceptive absurdities."

What possible object can be answered by meeting a homœopath in consultation, I cannot conceive. If a consulter have so little confidence in his own powers of observation as to feel it necessary to know what view of the case the homœopath has taken, he is simply not well qualified to be a consulter. If the regular practitioner stand by to see the effect of homœopathic so-called *remedies*, his conduct is certainly criminal. If, on the other hand, he carry out rational treatment, and the homœopathic practitioner sanction it by his presence, he proves himself the knave; and in neither case can there be any consolation to the relatives.

In no possible circumstances can any good come of such disingenuous consultations; no, not even to the unhapppy homœopath himself; as, if it it were to result in his conviction, it would still not end in his conversion; for, of course, except in some cases of slight mental obliquity, none of them believe in the potency of infinitesimal doses; and their own families are rarely, if ever, when seriously ill, treated homœopathically. The certainty of pecuniary success, in minds uncontrolled by high moral principle, or even by the lower motive of proper self-esteem, has read a sad lesson to human nature in the medical profession.

I am, etc., John Barclay.

Leicester, April 26th, 1861.

ON ATTENDING TO THE PERINÆUM DURING PARTURITION.

Sir,—The subject on which Dr. Graily Hewitt has communicated his views during the several last weeks, in your valuable Journal, is certainly one of considerable interest in the obstetrical department. It was, I thought, pretty freely discussed in last year's Journal; and I sent two letters, supporting, what I consider rather unfortunately called the *supporting* side of the question. I say unfortunately, because it suggests the idea of *force*, or rather of *resistance* to the natural efforts of the uterus. I could not but feel surprised that so much alarm should have been felt in the mind of your talented correspondent, Dr. Graily Hewitt, when I reflected on the fact that for many many years, clever heads, and hands possessed of the *tactus eruditus*, have taken their place at the bedside of parturient females, and conducted their labours; and yet that many of these should have been so much in the dark, and that such a flood of light should now all at once be thrown on the subject! It reminds me of a fable I heard many years ago, of a certain island on which the sun shone with great power and splendour; and one day it suddenly occurred to one or more of the islanders that they were in danger of becoming blind. A general apprehension was felt, and a consultation held as to the best mode of preventing the evil, when it was unanimously determined to wear coloured spectacles; but here there was unavoidably a demur as to the colour. Some proposed one and some another, and so pertinaciously did each party hold to its choice, that there seemed no probability of an adjustment. However, happily for them, another thought suggested itself—that the sun had been shining and shining for ages on the island, and they had not heard of its producing any great amount of ophthalmic affection; and that, therefore, they might as well continue as they were, with unencumbered eyes and noses.

It strikes me that the whole matter may be condensed into a small compass. As we have to do with an organ like the uterus, which, however nature may be extolled as perfect in all her operations, is very often deficient, often excessive, and not unfrequently capricious in its action, and as the fœtal head is sometimes large, sometimes presenting unfavourably; and as it has to pass with a *vis a tergo* through nicely delicate tissues, common sense, and, I would add, common kindness, suggest the propriety of watching the process, especially at the closing scene, when the greatest danger exists. It is for this purpose we take our seats by the bedside, to watch, to regulate, to guard.

It is not only to support, much less, as Dr. Graily Hewitt as very properly reprobated, to *push forward the perinæum*; but it is to endeavour, when the head is low enough, not before, to give it a direction under the pubic arch. For it must be remembered that the direction in which the pains force it is just calculated to lacerate the perinæum; and that this does not often or always occur is due to the gradual dilatation of the vulva and the strength and elasticity of the perinæum, and thus a force acting primarily in a straight line is, as is often the case in mechanics, converted into a curved one.

It has been my lot to witness exceedingly few lacerations in the course of my practice, though pretty extensive; and I must say that, whatever mischief of that kind I have seen has, I think, been attributable to inattention. Our duty is, in fact, as I view the matter, to assist; supporting where the pains are violent and the perinæum very bulging and attenuated; giving the head, as much as practicable, a pubic direction, and keeping the thumb on the angle of the fourchette, just where the laceration would commence, *to guide, not force*, the expanding mouth of the vulva over the largest part of the head. It is, if I might so illustrate it, just such a careful manipulation as a nurse would employ in drawing off a tight stocking over the heel of a sprained or gouty foot, only with this difference, that the foot is the susceptible part, and not the stocking. I mean only to point to the gentleness and the careful tact required.

Now, sir, what I mean as the drift of my foregoing observations is just this; that, however we may feel when we write or argue on such a subject as this, I cannot but think that most of my brethren would most assiduously watch and protect the perinæum, and put in exercise all their skill, care, and patience, when intrusted with so interesting a responsibility as that of ministering to a parturient female. I can hardly imagine any gentleman so doggedly tenacious of his unsupporting views as to withhold a little seasonable attention at such a critical juncture.

If we are determined to believe in the all-sufficiency of nature, and that she can and will always take care of herself, then let us fully carry out our doctrine, and down with both obstetricy and therapeutics altogether.

I am, etc., M.

[Perhaps our correspondent will modify his sentiments when he has read all that Dr. Graily Hewitt has to say on the subject.—Editor.]

"SUPPORTING THE PERINÆUM".

Letter from Graily Hewitt, M.D.

Sir,—The *principle* of C. H.'s (see p. 456 of Journal for April 27th) experiment—which experiment, by the by, I have found it practically impossible so to perform as to remove every source of fallacy from the result obtained—will be better illustrated by the following one:—

Lay a piece of sheet India-rubber, say four inches square, on a table. Fix the India-rubber to the table by means of four or more nails, the nails placed so as to inclose an area in the centre one inch square. If traction be now applied at the free edges of the sheet of India-rubber, the central portion inclosed by the nails will be necessarily unaffected by that traction.

The area of the perinæum covered by the hand represents the area inclosed by the nails in the above experiment; and it is evident that, if the hand be applied *forcibly enough*, the area in question will be less stretched than other portions.

So far, then, the result is, that counter-pressure may *delay dilatation*. This is the sum and substance of the whole matter. It is another question, however, whether so to delay dilatation is good for the safety of the perinæum, and one which I have already considered.

Any further answers to criticism I must postpone until after the completion of the series of papers now in course of publication.

I am, etc., Graily Hewitt.

36, Berkeley Square, April 29th, 1861.

THE MANCHESTER MEDICO-ETHICAL ASSOCIATION AND MR. ROBERTON.

Letter from John Thorburn, M.D.

Sir,—I, along with every member of our profession in Manchester with whom I have spoken, have been deeply pained at what we consider to be the unkind and ungenerous treatment of Mr. Roberton by the Manchester Medico-Ethical Association. You may, therefore, judge my surprise at seeing him made to point the moral of your last Saturday's leader. In saying this much, I do not dispute the accuracy of one word contained in the said leader. No one can condemn more strongly than I the connivance at any form of medical pretended systems by regular members of the profession; and I quite agree with you that those who do so connive at homœopathy or any other opathy, "when glittering gold persuades," should be excluded from consultation with their brethren. As an editor not residing in Manchester, you could not be expected to know more of the special case in point than you did; and, therefore, I would state again that it is not with your leader I would find fault, but with the ungenerous publication of correspondence which has given rise to it.

I know that it will grieve many a member of our Association if some one does not speak out to rectify this. Mr. Roberton is one of our oldest Associates in the north of England. By his writings he is favourably known far beyond the sphere of his personal usefulness. For about forty years he has conducted almost the largest and most respectable practice in Manchester; and, I say it without fear of contradiction, during the whole of that time, there is not a medical practitioner in England who has borne a higher character for integrity and professional honour and orthodoxy than he. To hint that "glittering gold" would tempt him to any step inconsistent with professional ethics would appear ridiculous to any one in Manchester. Nay, it is well known that there are very few men in the profession who have sacrificed a tithe of what he has by their steadfast resistance to the present fashionable pseudo-medical system.

In the case in point, he was summoned to see a very near and dear relative, always formerly his own patient, supposed to be dying of intestinal inflammation. Knowing that her husband (his brother-in-law) was a dabbler in globulism, and had already called in a homœopath, he refused to go, even under these circumstances, until assured that he should have a regular medical practitioner to meet him. Entrapped by this assurance, he found himself, at night, twelve miles from town, at his sister-in-law's house, and the homœopath there to meet him. The case was so urgent, and the relations were so frantic with fear, that he felt himself compelled to see the invalid. He prescribed in the ordinary way; such a thing as homœopathic treatment never being even hinted at. For two or three nights afterwards he saw her again in the same way; and she soon recovered.

The Medico-Ethical Association were fully informed of these particulars; its leading members more fully than I can give them. They knew that Mr. Roberton in his long life had before never so much as spoken to a homœopath; that he was as little a believer in the system as in Mormonism or witchcraft; and he stated to several of them that no circumstances could persuade him ever to yield thus far again. If, after being thus informed, they had chosen to express their disapproval of the course pursued, even in the most stringent terms, little could have been said further, than that they had strained a very proper professional rule in its application to a most delicate and perplexing case. No doubt, Mr. Roberton would have acquiesced in silence, and admitted, as he did, that he had been compelled by circumstances demanding our utmost sympathy and forbearance to do that which he hardly wished to defend even under those circumstances.

Very far otherwise, however, must the matter be viewed when they have thought fit to endeavour to brand as a supporter of quackery, before the whole profession of the kingdom, one who so little deserves the stigma. By rushing into print, and publishing, in every medical journal, the correspondence on the subject—a correspondence, too, evidently not intended for publication, but merely formal, and supplementary to the personal explanations he had given—they have endeavoured to put him in that light; and I repeat that I have not spoken to a member of our profession here who does not look on the endeavour as cruel and harsh in the extreme—an unnecessary blow aimed at the grey hairs of one who was entitled to professional esteem when most of its inflictors were yet in their cradles. No useful object was to be served by the wide-spread publication. The principle at stake is recognised on all hands, and was unimpugned by Mr. Roberton himself. Homœopathy is, or rather was till lately, but too rife here; and every effort is laudable to show that regular members of the profession will not condescend to pretend to its formularies for the sake of gain. No one can aid or has aided us more than yourself; but we shall not aid ourselves by falling unnecessarily foul of some of the best of our own body; and I am sure you will be glad to allow me thus to endeavour to remove a false impression which many at a distance might form of the merits of the present case. I am but slightly known to Mr. Roberton personally; but I cannot allow such an old and esteemed Associate to be undefended in the pages of our own Journal.

I am, etc., J. Thorburn, M.D.,
Hon. Local Sec. to Brit. Med. Assoc.

Small-Pox among the American Indians. Mr. Prescott, in his *History of the Conquest of Mexico*, describes small-pox as sweeping over the land like fire over the prairies, smiting down prince and peasant, leaving its path strewn with the dead bodies of the natives, who (in the language of a contemporary) "perished in heaps, like cattle stricken with the murrain." Even in our own day, dire evidences have been given by Catlin of its destructive agency amongst the American Indians. "Thirty millions of white men," he observes, "are now struggling and scuffling for the goods and luxuries of life over the bones and ashes of twelve millions of red men, six millions of whom have fallen victims to the small-pox, the remainder to the sword, the bayonet, or whisky." Washington Irving mentions entire tribes as having been wholly, or in great measure, exterminated by it. The tribe of Mandans was completely swept away; the Assiniboins, the Blackfeet, the Crows, and the Ricarees, almost so. It is stated, that the translation of the Bible having been made for the Six Nations, by the time it was finished there was not one left to read it, the whole nation having perished of small-pox. (*Dr. Collinson.*)

Medical News.

Royal College of Surgeons of England. The following gentlemen passed their first or primary examinations in Anatomy and Physiology, on April 23, 24, 25, 26:

Edinburgh School of Medicine.

Brittain, T. L.
Coates, F. W.
Compton, J. C.
Corlett, J. B.
Dixon, G.
Foote, H.
Haynes, S. L.
Hedley, W. S.
Hughes, T. H.
Jones, J. W. W.
Land, R. T.
Lisle, R. P.
Makinson, W.
Renton, W. M.
Rutherford, W.
Smirthwaite, S. V.
Squires, W. W.
Thorold, E. F.
Turner, J.
Weston, G. B.
Whitall, J. W.
Wilson, J.

St. George's Hospital.

Bright, J. A.
Brodie, G. B.
Fagge, F. T.
Freeman, S. G.
Gray, F. J.
Grove, W. R.
Lattey, T.
Leigh, T.
Lloyd, N. H.
Lyman, J.
Martin, A. R.
Rudge, J. E.
Smith, C.
Turner, A. N.

King's College.

Cann, T. M.
Deane, H. W.
Hopton, H. C.
Leaman, A. B.
Phillips, A.
Shepherd, C. D.
Teale, J. W., B.A.Oxon
Watmough, W.

St. Bartholomew's Hospital.

Butlin, C. H.
Evans, W. L.
Farwell, R.
Haycock, G.
Hayward, F. E.
Hughes, D. W.
Jenner, W.
Waghorn, F.

Leeds School of Medicine.

Clarkson, F. R.
Conolly, M. A.
Ellerton, J.
Lee, M.
Murgatroyd, T.
Oglesby, R. P.
Wadsworth, A.
Wright, C. J.

Manchester School of Medicine.

Coles, R. W.
Dawson, E.
Mann, J. D.
Patrick, S. A.
Rushton, J. L.

University College.

Ballard, W. W.
Fox, E. L. H.
Gargory, C.
Potter, J. B.
Warn, R. T.

Middlesex Hospital.

Mason, J. W.
Osbaldeston, L. F.
Probyn, J. S.
Purnell, R.
Welby, W. M. H.

Newcastle School of Medicine.

Dalgliesh, J.
Hawthorn, J.
Husband, E.
Newton, H. W.

London Hospital.

Ellison, S. K.
Galbraith, J.
Taylor, C.

Guy's Hospital.

Mann, A. G. C.
Procter, P.
Thomas, G. J.

St. Mary's Hospital.

Gardner, J. F. W.
Lynch, J. R.
Rayner, W.

Charing Cross Hospital.

Cooke, G. R.
Delamotte, G. C.
Morgan, N. J.

Liverpool School of Medicine.

Bowen, J. A.
Hanks, W.

St. Thomas's Hospital.

Deck, J. F.

Aberdeen School of Medicine.

Dudley, E.

Westminster Hospital.

Long, A.

Dublin School of Medicine.

Barker, E. R.

The following gentlemen were admitted Members of the College on April 30th:—

Appleyard, James, Cleethorpes, near Grimsby, Lincolnshire
Beddard, James, Dudley, Worcestershire
Beg, The Rev. Wazer, Poona, near Bombay
De Smidt, John, Cape of Good Hope
Eddowes, William
Ellery, Richard, St. Stephen's-by-Saltash, Cornwall
Greene, Frederick William, Upton Park, Slough
Greene, James Augustine, M.D., Calcutta
Grenfell, Henry, St. Just, Cornwall
Hodson, Thomas, Cocking, Sussex
Hutchings, Henry Ebenezer, Dorchester
Jones, Morris, Aberystwith
Kidd, Henry Alexander, M.D., Calcutta

Lawrence, Frederick George, Cambridge
Peel, Robert, Durham
Rawson, Edwin, Kirkstall, near Leeds
Roper, Arthur, Aylsham, Norfolk
Sealy, George John, Marazion, near Penzance

The following gentlemen were admitted on May 1:—

Axham, Frederick William, Bideford, Devon
Brumwell, John Robert, Burnley, Lancashire
Caudle, Adolphus William Wisden, Henfield, Sussex
Clarke, Edward Griffith, Pontardulais, Llanelly, Carmarthen
Dunlop, Robert, Drumhead, Dumbartonshire
Greaves, Charles Henry, Great Easton, Leicestershire
Griffiths, William Hughes, Llangeler, Carmarthen
Haswell, Narcis Richard, Falmouth
Holmested, Thomas, Bocking, Essex
Holt, George C., Biddulph, Staffordshire
Jones, Edward, Dolgelley, Merionethshire
Leeds, Edward, B.A.Oxon., Stretford, Manchester
Martin, Henry Arthur, St. Austell, Cornwall
Minns, Pembroke R. J. B., Nassau, New Providence
Pocock, Crawford John, Brighton
Pole, Alexander, Shetland
Soper, William, Clapham Road
Stamper, James Fenton, Haverfordwest
Tanner, Robert, Ledbury, Herefordshire

Apothecaries' Hall. On Thursday, April 25th, the following licentiates were admitted:—

A'Beckett, W. G., Melbourne
France, W. H., Sheffield
Greenwell, B., St. John's Wood
Hill, J. D., Cranoe, near Market Harborough
Hutchinson, J., Catterick
Kent, O. J., Hampton, Middlesex
Knapp, J. Clifton
Rawson, E., Wilsden, near Leeds
Spencer, W. H., Preston
Thomas, D. B., Newcastle Emlyn
Tucker, A. C., Sheepwash
Watson, W., Sedburgh
Willett, J., Great Bedworth
Wright, A., Mountsorrel

APPOINTMENTS.

Strange, William, M.D., elected Physician to the Worcester Infirmary, in the room of Dr. Davis.

University of London. The following Examiners were appointed by the Senate on April 24th:—

Miller, W. A., M.D., F.R.S.	Examiners in Chemistry.
Williamson, A. W., Ph.D., F.R.S.	
Hooker, J. D., M.D.	Examiners in Botany and Vegetable Physiology.
Lindley, John, Ph.D., F.R.S.	
Jenner, W., M.D.	Examiners in Medicine.
Tweedie, A., M.D., F.R.S.	
Curling, T. B., Esq., F.R.S.	Examiners in Surgery.
Fergusson, W., Esq., F.R.S.	
Redfern, P., M.D.	Examiners in Anatomy and Physiology.
Sharpey, W., M.D., F.R.S.	
Busk, George, Esq., F.R.S.	Examrs. in Physiology, Comparative Anatomy, and Zoology.
Huxley, T. H., Esq., F.R.S.	
Smith, W. Tyler, M.D.	Examiners in Midwifery.
West, C., M.D.	
Garrod, A. B., M.D., F.R.S.	Examiners in Materia Medica.
Rees, G. O., M.D., F.R.S.	

Royal Navy. The following appointments have been made:—

Mulcahy, Edward, Esq., Acting Assistant-Surgeon, to the *Wye*.
Nihill, John, Esq., Surgeon, to the *Hastings*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Browne, W., M.D., to be Surgeon 1st Northumberland R.V.
Lownds, J. R., Esq., to be Assist.-Surg. 1st Northumberland R.V.
Lawrence, L. A., Esq., to be Assistant-Surgeon Hampshire Militia Infantry.
Palmer, F. W., M.D., to be Surgeon 3rd City of London R.V.
Sutherin, H., Esq., to be Assistant-Surgeon 20th Middlesex R.V.

To be Honorary Assistant-Surgeons:—

Foster, T. B., Esq., 13th Devon A.V.
Reeve, J. F., M.D., 6th Tower Hamlets R.V.
Saville, W., Esq., 19th West Riding R.V.
Todd, R., M.D., 9th Fife A.V.
Utermarck, G., Esq., 2nd Administrative Battalion, 19th Company, Staffordshire R.V.

DEATHS.

Clark, John, M.D., Deputy Inspector of Army Hospitals, aged 54, on April 27.
Couch, Wm. O., Esq., Surgeon, at Islington, aged 57, on April 24.
FitzGerald. On April 18th, at Cheltenham, aged 55, Ellen L., widow of the late John F. FitzGerald, M.D., of Carrick-on-Suir.
Gibson. On April 29th, at 3, Spring Place, Bagnigge Wells Road, aged 4, Elizabeth B., eldest child of J. B. Gibson, Esq., Surgeon.
Kilvert, John, Esq., Surgeon, at Bath, aged 63, on April 28.
Manley. On April 27th, at Tyldesley, near Manchester, aged 30, Eliza, eldest daughter of *W. E. Manley, Esq., Surgeon.
Martin. On April 27, at Brighton, Lucy Jane, youngest daughter of the late *Peter J. Martin, Esq., Pulborough.
Porter, William H., Esq., Surgeon, in Dublin, on April 27.
*Probart, F. G., M.D., of Bury St. Edmunds, aged 79, on April 25.
Williams, John W., Esq., Surgeon, at Duffield, Derbyshire, aged 37, on April 23.

Dr. Henry Bennet. We are glad to hear that Dr. Henry Bennet, after spending two winters in Italy, is enabled to resume his practice in town.

The Italian Parliament. Out of three hundred and sixty-two deputies in the Chamber of Representatives at Turin, twenty-five are physicians, and one hundred and one advocates.

Seizure of Unsound Meat. Dr. Letheby, in his quarterly report of the health of the City, states that, in the course of the past quarter, twenty-five tons and a quarter of meat, unfit for human food, have been seized by the officers of the City of London.

The Indian Army Sanitary Commission. The Royal Commission on the sanitary state of the army in India held a meeting at the War-office on Saturday last. The following commissioners were present:—Lord Herbert, Sir Proby Cautley, Sir Ranald Martin, Colonel Greathed, Dr. Gibson, Dr. Sutherland, and Dr. Farr.

Rank of Army Medical Officers. A Royal Warrant has been issued to the effect that, after March 28th, the staff or regimental assistant-surgeon who may be promoted to the rank of staff or regimental surgeon, shall rank as majors, but juniors of that rank; and that staff or regimental surgeons who were commissioned as such before that date shall continue to rank as majors according to the date of their commissions.

Suicide by a Surgeon. Mr. Noah Fox, one of the medical officers of the Nottingham Union Workhouse, on April 26th, committed suicide by taking a large dose of opium. Deceased had for some time past been much addicted to drinking, which no doubt had affected his mind. An inquest was held yesterday on the unfortunate gentleman's body, when a verdict in accordance with the circumstances of the case was returned.

Degree of Master in Surgery in the University of Cambridge. A statute formed by the Commissioners on Oct. 23rd, 1860, concerning the mode of proceeding to the Degree of Master in Surgery in the University of Cambridge, was approved by Her Majesty in council on April 16th. The Master in Surgery will acquire the same status and privileges in the university as a Master of Arts. The candidates for the degree must reside nine terms and conform to the regulations for the study of arts and surgery which may be made, from time to time, by the university. The regulations will probably be issued shortly.

The Egyptian Fever again. Letters from Alexandria, dated April 11th, announce the arrival on the 7th inst. of the Egyptian frigate *Voyageur de la Mer* after a fine run of seventy-four hours from Malta, and that eleven of her crew were landed in hospital the same day suffering from the disease which has already been described. Of the thirteen Europeans who embarked at Liverpool only one person, the first engineer, has escaped being attacked by this singular epidemic. The English medical officer attached to the Egyptian Government considers it to be gastric fever, which when neglected may prove of a malignant nature.

Royal College of Surgeons of Ireland. The Summer Session of medical study for the present year was inaugurated on the 15th inst. by Dr. Macnamara, F.R.C.S.I., Professor of Materia Medica to the College, who delivered the introductory address. The theatre of the college was crowded with students from the lower to the upper seats, and the space below in the vicinity of the lecture table was occupied by a large body of eminent members of the medical profession, including several Fellows and Members of the college, also a number of non-medical visitors. Dr. Ireland, of Stephen's Green, is a candidate for the office of Vice-President of the Royal College of Surgeons of Ireland.

Sanitary Statistics of the City. In the city of London during the winter quarter there has been a large increase in the number of deaths, and a falling-off in the number of births, the former having advanced from an average of 840 in the quarter to 876, and the latter having declined from 926 to 863; the deaths, therefore being in excess of the births. In all England the mortality for the winter quarter is at the yearly rate of about 26·6 per 1000 of the population, and in the chief towns of England it is 26·4; whereas in the whole City it has amounted to 27, and in some districts has reached to 33. The chief causes of this large increase have been the cold and damp of the season. The influence of cold and wet in augmenting the death-rate is strikingly evidenced by the fact that when the temperature of the air was below the freezing point, and the humidity of the atmosphere was over 90 per cent. of saturation, the mortality was nearly doubled.

Asylum for Idiots, Earlswood. On April 26th the annual meeting of this institution was held at the London Tavern, Sheriff Abbiss expressed his hope that before long they would be able to call the splendid building at Earlswood, worth £60,000, their own property. At present there was a mortgage upon the property of £9,000. Last year they had paid off £3,000, and if their friends continued to be as generous as they had been, in two years they would be out of debt. The report stated that the number of inmates was 336, and, with the officers of the institution, upwards of 400. The funds had been generously aided by bequests during the year amounting to £3,010. The medical report, read by Dr. Down, bore most favourable testimony to the sanitary condition of the inmates, and the beneficial effects of the workshops. A vote of thanks was given to Drs. Conolly and Reed for their gratuitous services.

Viennese Medical Students in Trouble. Some students are still in custody for taking a share in the demonstrations against his Eminence the Cardinal-Archbishop of Vienna. The day before yesterday Dr. Oppolzer, one of the most renowned physicians in Austria, went in his capacity of Rector Magnificus of the University to request the Minister of State to give orders that the students who were "missing" should be liberated. While pleading the cause of the young men Dr. Oppolzer said that he spoke in the name of the "Studentenschaft," a word which indicated that the students formed a corporate body. On hearing it, M. von Schmerling observed that it could only be a question of individual students, as no "Studentenschaften" existed in Austria. He added, that he was willing to make due allowance for the exuberant spirits of youth, but would take care that they did not play such mad tricks as they did in 1848. (*Times.*)

Sir John M'Neill. A public meeting of the University of Edinburgh was held on April 22nd, for the purpose of conferring degrees in laws and arts. Sir David Brewster, Principal and Vice-Chancellor, presided. Professor Swinton presented to the Vice-Chancellor the Right Hon. Sir John M'Neill to receive the honorary degree of Doctor of Laws (LL.D.). In presenting Sir John M'Neill, he said that, having graduated in medicine at the University of Edinburgh at the early age of nineteen, he sought in the East a field for his professional attainments, but ultimately exchanged the practice of the physician's art for the diplomatic service of the State; and during long years of perilous adventure, fitly crowned by his appointment as British Envoy at the Court of Persia, his zeal, ability, and discretion, had gained the confidence of the country and the special favour of the Crown. Of the fidelity with which he had since brought his administrative talents to the discharge of important duties at home, all were aware, and history would tell of the disinterested devotion to the call of duty with which he undertook a mission to the camp before Sebastopol, and lent the aid of his tried wisdom and extensive experience in retrieving the disasters of a suffering army and restoring the confidence of an anxious nation.

Births, Deaths, and Marriages in 1860. The Registrar-General for England has issued his annual tables of the number of births, deaths, and marriages in 1860. The number of marriages (170,305) is larger than in any previous year; the nearest approach to it was in 1859, when the number was 167,723. The births in 1860 (683,440) were fewer by 6441 than in 1859, but that is the only year in which they were exceeded; the deaths (422,472) were happily less by 18,777 than in 1859, and less also than in 1858, 1855, or 1854. Allowing for the estimated increase of population, the births in 1860 were slightly above the average rate of the preceding ten years; the marriages were more above it, and the deaths were still more below it: all movements in the right direction. As usual, the first half of the year saw the greatest number of births, about ten per cent. more than the last half; and the deaths in the first moiety were greater than in the last by the large ratio of twenty-three per cent. The last quarter was, as usual, the marrying season; there were 50,702 marriages, and only 35,198 in the first quarter. Lincolnshire is always a notable exception to this last rule; there the spring quarter is the chief time for marriage.

Assistant-Surgeons in the Army. In the House of Commons, on April 26th, Lord Burghley asked the Under Secretary for War why a large number of staff assistant-surgeons had been placed upon half-pay; and how long it was probable that the state of half-pay, as regarded those officers, would be continued? It was a great hardship that these officers, just entering their profession, should be suddenly put upon half-pay, thereby depriving them of the chance of that promotion to which they would ultimately be entitled.—Colonel Lindsay, on the part of Colonel North, called the attention of the house to the reduction of the second assistant-surgeons of the regiments of the line.—Mr. Baring said that he had intended to state the other night that the second assistant-surgeons of the battalion of the Guards would not be taken away, and that no second assistant-surgeons in the regiments of the line would be placed on half-pay. It was thought, however, that second assistant-surgeons in the regiments at home were no longer necessary. In the opinion of Lord Herbert a second assistant surgeon to regiments at home was no longer required, and it was obvious that any increase in the number of assistant-surgeons would be rather prejudicial to the prospects of promotion for members of the service.

University of Edinburgh. At the last meeting of the Edinburgh University. sixty-two young gentlemen offered themselves for the graduation in arts, the largest number of candidates for degree that have offered themselves for a century and a half. Twenty-eight took the degree of Master of Arts, and thirty-four the degree of Bachelor. They were addressed by Professor Frazer, who adverted to the circumstance that this was a revival of the scenes that took place in the early history of the university, when from fifty to a hundred graduates were often received in a single year, when the number of students was less than a half of what it now was. In the eighteenth century and up to the passing of the recent Act, the privilege of graduation almost ceased to be sought after, owing, no doubt, to the want of that self-governing power which the Scottish universities had since secured, and owing to the circumstance that hitherto graduation possessed no privileges; whereas, now the graduates were organised in a body as a general council to consult on the affairs of the university, and hoped soon to obtain the further privilege of a representative in Parliament, which the Scotch universities could no longer remain destitute of if this part of the United Kingdom was to have its share in the intellectual influence which the universities possessed in the legislature.

The Dental Hospital of London. The first anniversary of this institution was celebrated by a public dinner on the 25th ult., at which about one hundred and thirty gentlemen—including the President of the College of Physicians, Mr. A. B. Beresford Hope, and other eminent persons distinguished in the dental profession, and supporters of the hospital—sat down, under the presidency of Professor Owen. The chairman in proposing the toast of the evening, "Success to the Dental Hospital of London," said the progress in anatomical investigation in dental surgery, after the work of Hunter making known the organisation of the teeth and its adaptation, was most important, and there could be no doubt of the usefulness of an institution that would afford application for that knowledge and experience that had been the issue of the advances of medicine and surgery. They had had hospitals established for nearly all sorts of human maladies, but there were very few maladies that left so vivid an impression of their sufferings as those of the teeth. It had been said that there never was a philosopher that could bear the toothache patiently; and although the maladies of the teeth might seem to be small things, yet in the aggregate they were very important. The medical report of their hospital, showing the great amount of relief of suffering, was plain and unmistakable, and he was sure the public only wanted to know how much good the institution did in order to give the requisite support. The organisation of the institution was such as to afford the greatest experience, and clearly showed how widely the profession extended over the land through the application of the principles of what they knew of the anatomy of the teeth. He only wished what he and they knew about it should be known throughout the metropolis, at least. He felt more heartfelt gratification and pleasure in the success of this institution than in many kindred institutions that he knew of. The affair was a complete success.

The late Mr. Porter of Dublin. W. H. Porter entered as one of the earliest Fellows of the Royal College of Surgeons of Ireland, in November 1817. In 1821, he published in the *Medico-Chirurgical Transactions* his first essay, a Successful Case of Cynanche Maligna, with Tracheotomy; and shortly afterwards, in 1826, his work on the *Larynx and Trachea.* In 1830, he published Cases of Ligature of Subclavian and Right Carotid, and a Case of Tracheotomy, in the *Dublin Hospitals Reports*; and from 1832 to 1834, Cases of Axillary and Subclavian and Internal Aneurisms, Memoir on Amputation in spreading Gangrene, and Cases in the Meath Hospital, all in the *Dublin Journal of Medical Science.* His contributions to the *Cyclopædia of Anatomy* were—three articles on the Morbid Anatomy and Pathology of the Arteries, of Bone, and of the Larynx; and an Essay on the Anatomy of Hernia. Observations of Fractures of the Neck of the Femur, Contributions to Surgical Pathology, and a Memoir on the Radical Cure of Hydrocele, also appeared in the *Dublin Journal of Medical Science.* In the *Dublin Medical Press* have appeared his Lectures on Surgery and on Syphilis and its Treatment by Mercury, and on Calculus in the Bladder, and his Observations on the Treatment of Aneurism. The foregoing are the most important of his writings, though not the only ones. Mr. Porter was elected Surgeon to the Meath Hospital in November 1819, in the place of Mr. Solomon Richards, and continued to hold the appointment till the day of his death, a period of nearly forty-two years, respected by his colleagues, and beloved by his pupils. In October 1836, he succeeded Mr. Abraham Colles as Professor of Surgery in the School of the Royal College of Surgeons; and it is but a few months since he delivered his last lecture in that school. He has held for very many years an honourable position on the Council of the College, and, on the death of the late Dr. Williams, was elected the Representative of that body on the General Medical Council. His death was altogether unexpected, his health having almost entirely recovered from a severe attack of bronchitis and a fracture of his thigh-bone. He had complained on Saturday last of slight pains in his chest, which were not, however, considered of any importance. He retired to bed on that evening in his usual health, and was found dead in his bed the next morning. (Abridged from *Dublin Med. Press.*)

Varieties.

A New Cure for an Incurable Affection. A remarkable discovery has been made in Germany by a physiologist—the exact cause of "sea-sickness." The "up and down" tension of the muscles on a particular valve of the stomach while an animal is under chloroform, is now shown in lectures to bring on sickness in such animals at once. The same occurs in a rough sea when a vessel heaves up and down. Some remedies, chiefly to steady the muscles, such as a particular form of bandage to be worn at sea, a combination of champagne and other remedies to drink, have been referred to as stopping "sea-sickness" in an instant.

Effects of Painting Ships with Red Lead. M. Jouvin, apothecary in the French navy, has lately made a communication to the Academy of Sciences on the evils of painting iron ships with red lead. The observations of this gentleman were directed to the *Guienne*, which had made three voyages. He found a number of what he calls pustules on that portion of the vessel which had been submerged; in opening these, which were very thin, he discovered little cavities filled with a liquid containing chloride of iron, and having their sides covered with crystals of lead. The effect was evidently due to the salt water, as there were no such pustules on the upper part of the ship.

The Pharmacy School in Paris. There are ten professors attached to the School of Pharmacy, who lecture on pharmacy, chemistry, natural history, and botany. No apothecary can practise until he has passed an examination here. It contains a cabinet of specimens of all kinds of drugs, with a select mineralogical collection, also a small but select library. Attached to it is a botanical garden, which was the first ever establised in France, and dates back as far as 1580. The medicinal plants that will bear the climate are here cultivated and classified. It will be *apropos* to add here, that, at the Jardin des Plantes, there is a botanical gallery, which contains, among other interesting objects, a collection of drugs.

Esquimaux Food. In the autumn, the berries of the *Empetrum nigrum*, *Vaccinium uliginosum*, and *Vitisidea*, *Rubus chamæmorus* and *arcticus*, and of a few other arctic fruit-bearing plants, are eaten, and the half-digested lichens in the paunch of the rein-deer are considered to be a treat; but in other seasons, this people never tastes vegetables; and even in summer, animal food is alone deemed essential. Carbon is supplied to the system by the use of much oil and fat in the diet; and draughts of warm blood from a newly-killed animal are considered as contributing greatly to preserve the hunter in health. No part of the entrails is rejected as unfit for food; little cleanliness is shown in the preparation of the intestines, and when they are rendered crisp by frost, they are eaten as delicacies, without further cooking. On parts of the coast where whales are common, August and September are devoted to the pursuit of these animals, deer-hunting being also attended to at intervals. The killing of a right whale or of a sufficient number of the *killeluak* (*Beluga albicans*) secures winter feasts and abundance of oil for the lamps of a whole village, and there is great rejoicing. On the return of light, the winter-houses are abandoned for the seal-hunt on the ice, sooner or later, according to the state of the larder. (*Sir J. Richardson.*)

Relative Proportions of Professions. "Of the professions in England and Wales (we need say nothing about their distribution), it appeared at the last census that one man in a hundred and eighty was a minister of religion; schoolmasters were in almost the same proportion; but there were not two-thirds of the number of medical practitioners, and of these only one man in two thousand five hundred was a physician. The artist, reckoning together painter and sculptor, proved to be one man in a thousand, or one woman in ten thousand. One man in five thousand was an editor or a journalist; one man in ten thousand was an author. In all England and Wales the whole number of women returned ten years ago as engaged in literature—a number yielding no appreciable proportion on the entire population —was but one hundred and nine."

How does a Cow rise from the Ground? Nothing was too minute to escape the observant eye of John Hunter; and some of the evidences of the close scrutiny with which he surveyed the natural world would evoke a smile, even in the countenance of the serious reader. Take, for example, his observations upon the "rising of animals":—"All the ruminating class of animals, I believe, when they rise raise their hind parts, and at the same time get upon their fore knees; this is the first step. Then they raise their hind parts entirely upon their hind feet; then the fore feet are raised, but one before the other. When they lie down, they first get upon the knees of the fore legs; then the hind parts fall down; and then the fore legs are folded in under the body of the animal. A horse when he rises first raises his anterior parts upon his fore feet, the fore legs being then very oblique, and the feet under his head; the hind legs are brought alongside his belly, and the feet are under him. He then raises at once the hind parts, in which action the fore legs are brought erect by the whole body being brought forwards upon the feet." There are few, we should think, that have not seen a cow raise herself in the field, or a horse in the stable; but how many are there who have noticed the difference between the modes in which the two animals perform this act?

Chinese Civilisation. A missionary, a medical practitioner and a layman, Mr. Lockhart, was long and usefully employed in China. His opportunities were good; his mastery of the healing art gained him friends among the rich and poor; and having fallen upon pleasant ways in the Flowery Land, his book is amiably tinctured with gratitude. The Chinese, he avers, notwithstanding the new opinion of them engendered of late years in Europe, are an educated people; the schoolmaster is in every village; but few of the women, he admits, are able to read. One proof of civilisation he adduces, which the least enthusiastic of Sinologists may appreciate—the holder of the degree known as Sew-tsae, or Adorned Talent, is exempt from corporal punishment. Great, too, are the dignities to be derived from The Forest of Pencils. Judging by results, we are not yet persuaded that the intellect of China stands at a very high level; but Mr. Lockhart ought to be a competent witness. He has not thrown his reminiscences into a narrative form, but has more judiciously grouped them in a series of synoptical chapters, the first of which contains notices of benevolent institutions, foundling hospitals, prisons, criminals, and punishments, the last being practical commentaries upon the civilisation so highly vaunted. Industrially, no doubt, the Chinese are in advance of most Asiatic nations; but, even in this respect, do they exhibit any progress? Mr. Lockhart minutely describes their processes of steaming bread, oil-making, varnishing, metal-casting, lacquering, ivory-carving, and we seem to be reading a copy from books of immemorial date. As to the sciences, "medicine has not been studied to any purpose," and there is, consequently, a wide field open to medical missionaries, who, the writer thinks, should almost invariably be laymen. (*Athenæum.*)

Chinese Medicine. Anatomy, says Mr. Lockhart, is totally interdicted both by law and public opinion in China. Any man, however, may practise medicine, and thousands do so, with the slender knowledge which books afford, or by the exercise of their own common sense, which proves a safer guide, and brings persons occasionally into notoriety, and also a good income. In these books, which are based upon principles adopted two or three thousand years ago, the important doctrine of the circulation of the blood is not only not understood, but preposterously confused and erroneous. Their theory of the pulse proves this to a demonstration. There is no distinction between arteries and veins—no knowledge of the heart's proper function, nor of the necessary changes the blood undergoes in the lungs and capillary system. The Chinese know nothing of the nervous system, its functions and diseases. They have names for the brain and spinal marrow, but nothing more. They have a pulse for every organ but the brain. The true position, forms and uses of the viscera are not understood. They profess to be so, but a glance at their drawings discovers the most glaring errors. There is no lack of books and observations on the functions of the body; for everything, even the most inscrutable and mysterious, is explained by the Yin and the Yang, the hot and the cold, the dry and the moist, the superior and the inferior influences! Almost every symptom is a disease, and every prescription (of which the books contain thousands) is for every imaginable symptom, indicating a miserably small amount of acquaintance with the nature and the causes of disease.

Titles among Medical Men. "The medical profession," writes an American physician travelling in Spain, "seems not to be much esteemed, probably in part because it has not been worthy of it, and in part from the old ideas that the army and the church are the only respectable ways for making money. Honours are now, however, given to physicians; one of the four who attend the Queen has been made a marquis, and I have no doubt that, in a few years, the profession will take the stand it ought to occupy. I do not know what idea the title of Marquis, given to a physician, will have upon your readers; but here it is looked upon very much as that of LL.D. is in our country, so common as not to be much esteemed, and sometimes to be refused, by those who either have no money to support the dignity, or, as is the case again with the American title, by those who think they will be admired and talked about more by refusing than accepting. In the latter category is the great banker, Salamanca, who declined the title of Count, and in the former that of a gentleman formerly minister at Washington, who declines that of Marquis. Of course those who are in possession of ancient titles value them very much, and *such* titles are not in the above category at all. In England, new titles are more valued because more sparingly given, and the medical profession is anxiously waiting for some one of their number to be elevated to the peerage. This much-desired event has been postponed, and perhaps an inseparable obstacle placed in its way by a bon mot of George IV., who declined to make a baron of a certain doctor lest the ladies should say to him, 'Good Lord, deliver us.' So they have to be content with being knights and baronets, of which there are abundant instances."

Statistics of Insanity in Europe. According to the most recent statistics, there is one insane person in every 1,200 of the population, in the different states of Germany. In France, a gross number, (according to some,) of 18,350, and, (according to others,) of from 30,000 to 32,000 lunatics, will yield, respectively, one insane person in 1,900, and one in 1,000. But still, in this estimate, there should be a division made between the smaller towns and those great centres of commercial industry where the relative proportion is always greater than in agricultural districts. In England, the number of insane is greater than in France, and attains in Scotland the high ratio of one in 513. The statistics, indeed, of Dr. Mario Rubio, framed in 1848, put the North British figure at one in 417. The mean average of his calculation will be found to be one in 446 in the canton of Geneva, one in 550 in Norway, one in 816 in Belgium, one in 700 in England, one in 1,223 in Holland, one in 1,667 in Spain, one in 1,773 in France, (there being about 21,000 insane,) one in 2,125 in Ireland, one in 3,690 in Italy, one in 5,818 in all the Piedmontese possessions. For Russia, the average is still lower. In these statistics, where France, we think, should figure at a higher average, we meet with considerable and hitherto unexplained disproportions; since Scotland is rated at one in 417, whilst Piedmont only attains the level of one in 5,818. It is evident, that amongst the insane of the latter country are not included those degenerate beings termed *cretins*, whose terrible affliction is dependent upon the geological structure of the soil, and who people in great numbers the valleys of Martigny and Aosta, and the mountainous districts of the Alps. The same anomaly shows itself in various departments of France; since, if we estimate its average by the lunatics in the asylums of Saint-Yon and Quatre-Mares, the proportion for the Seine-Inférieure will be as one to 650 or 700 of the inhabitants. (*Morel's Traité des Maladies Mentales.*)

Medical Education in Madrid. In the School of Medicine of Madrid there are nearly seven hundred students. Six or seven years study are, however, required, so that only sixty or seventy graduate each year. The museum of the college contains a very interesting specimen of transposition of the viscera—the liver being on the left side and the stomach and intestines turned around to correspond, the cæcum on the left and the sigmoid flexure on the right side. A skeleton of a giant, seven feet and eleven inches high, was pointed out to me. The dissecting room is very fine, having very high ceilings, and not being at the top of the house, as the case with those at home. In the laboratory, I saw a very neat and simple apparatus for detecting blood-stains by hypochlorous acid, which will bleach everything else. Here, from all parts are sent cases of poisoning. In the college are twenty-four professors and eight assistant professors. There is a small hospital in the building itself; but in the building next to it, and which indeed opens into it, is situated the great General Hospital, containing twelve hundred beds. It is built on the four sides of a court, and is three stories high. A ward on one side, into which I went, contained seventy beds, and was only separated by a partial partition from another of equal size, which ran parallel to it, and had windows opening on the street instead of on the courtyard, as was the case with the other. I hardly knew whether to call it one ward of one hundred and forty beds, or two, each of seventy. I am informed that there are, at least, two hospitals in Europe larger than this—one at Brussels, and one at Milan, which contains thirty-two hundred beds. In the School of Medicine, I saw the room where degrees are conferred. Over the chief chair is a portrait of Isabel II, as indeed it is in every similar room which I have been in. (*Med. and Surg. Rep.*)

Dr. Parkes on the Action of Alcohol. "Whatever may be the difficulties, at present, of discussing this most important subject in the case of healthy persons, there can be no doubt that what is known of the action of these substances assists us very much in using them in disease. The nervous system is stimulated, and metamorphosis lessened, by coffee, and slightly by tea; and in exhausting diseases these effects are most useful. I presume that, while sugar, starch, etc., are available, it can seldom be necessary to employ alcohol as a factor of heat; this object can be obtained by more easy and more certain methods. The physician, as I take it, uses alcohol for two great purposes—as a direct stimulus to the weakened stomach, and as a stimulant of the nervous system, and, through it, of the failing heart. Now, in our choice of alcoholic fluids, we must be guided, it appears to me, by the consideration of how far it is wished, at the same time, to check or to increase elimination. For example, in the last stages of fever, when the body has wasted almost to extremity, and when, as the controlling power of the nervous system is lost, too great disintegration may still go on, even in the emaciated tissues, pure alcohol, which stimulates the heart's action, and yet impedes metamorphosis, must be employed; while, in other cases, in which, while the nervous system and the heart must be stimulated, it is desired not to check excretion (as during the absorption of exudations), the lighter wines, or the combination of spirit with alkaline salts, should be chosen. In the vast class of chronic complaints dependent on lesions of nutrition, obstinate congestions, and continued parenchymatous inflammation, and in which, as a rule, digestion is weak and tissue-change is lessened, the same rules hold good; and, by a judicious combination of means, we may obtain from these substances the effects we desire from them, and can counteract and nullify the influences which should be avoided."

The Red Sea. A report was lately presented to the Academy of Sciences, on a paper sent in some time ago by M. Courbon, on the results obtained by him during an expedition sent to the Red Sea for scientific purposes by the Emperor of the French. M. St. Claire Deville, who was the reporter for the geological part, stated that M. Courbon had minutely examined many parts of both coasts of the Red Sea, had also crossed the Egyptian Desert between Cosseir and the ruins of Thebes, and even penetrated to the neighbourhood of Haley, in Abyssinia. Of this country, M. Courbon has made a geological map, and, moreover, given a minute description of the configuration of the soil at Jeddah, the island of Desseh, and the bay of Adulis, the island of Doomairah, etc. At Edd, he found an immense basaltic wall built by nature, the whole country being of volcanic formation. The island of Perim is trachytic; the culminating points of the island reach an elevation of 228 feet, and prove that the island itself is the result of a volcanic eruption under the sea. The lava had first raised up the large bank of madreporas which covered the bottom, and had then forced its way through the interstices, and become visible over the water. This volcano, the vast crater of which embraced the bay of Perim, in course of time covered the new island with mud, ashes, trachytic blocks, etc., and then became extinguished. M. Valenciennes, who reported on the zoological part, noticed among the specimens brought by M. Courbon a new species of the genus *gymnodactylus*. It is a Saurian, to which M. Valenciennes has given the name of *gymnocephalus*. There were also two species of fish, the *cyprinodon lunatus* and *cyprinodon dispar*, which M. Courbon had fished in a lake near Massuah, the waters of which marked as much as 111° Fahrenheit. This was the first instance on record of *cyprinodons* living in such warm water. A third kind of fish, inhabitating the rivers of Abyssinia, quite unknown, and belonging to a genus of which a single species only has as yet been met with in Java, M. Valenciennes has called *balitora pusilla*. M. Brogniart, the reporter on the botanical part, stated that M. Courbon had presented his valuable herbarium to the Museum of Natural History, and mentioned several new species or varieties of plants brought home by the enterprising traveller.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.
TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.
WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.
THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.
FRIDAY....... Westminster Ophthalmic, 1·30 P.M.
SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Epidemiological, 8 P.M.: Dr. Smart, "On the Diseases of Hong Kong and the Canton River Station."—Entomological, 8 P.M.—Odontological, 8 P.M.
TUESDAY. Pathological, 8.30 P.M.—Photographic.
WEDNESDAY. North London Medical, 8 P.M.—Geological.—Microscopical.—Royal Society of Literature.—Society of Arts, 8 P.M.
THURSDAY. Antiquarian.
FRIDAY. Astronomical, 8 P.M.—Royal Institution.
SATURDAY. Asiatic (Anniversary).—Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—APRIL 27TH, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week......................	Boys .. 930 Girls.. 928	1858	1182
Average of corresponding weeks 1851-60		1650	1234

Barometer:
Highest (Sat.) 29.960; lowest (Tu.) 29.733; mean 29.840.

Thermometer:
Highest in sun—extremes (Mon.) 95 degs.; (Sat.) 42 degs.
In shade—highest (Th.) 61.3 degrees; lowest (Sun.) 26.8 degrees.
Mean—44.3 degrees; difference from mean of 43 yrs.—3.2 degs.
Range—during week, 34.5 degrees; mean daily, 19.9 degrees.
Mean humidity of air (*saturation*=100), 80.
Mean direction of wind, N.E.—Rain in inches, 0.52.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

BENZOATED OXIDE OF ZINC OINTMENT.—Mr. Tasker writes:—"A benzoated oxide of zinc ointment was strongly recommended as an application in eczema infantile by Mr. Erasmus Wilson, in a paper which he read before the Association in 1856. No formula was then given for this ointment; neither have I anywhere seen any form for its preparation. I shall feel greatly obliged, and it is very probable that many other members will be equally so, if you can give us in the JOURNAL the formula for this highly eulogised unguent."

A CHARITABLE DINNER-INVITATION.—SIR: At the present time bland invitations to charitable dinners are more than usually abundant; but I have been surprised and amused at the easy familiarity with which I am invited, in a printed circular, by a gentleman who is a total stranger to me, to do him "the personal favour" to attend a dinner for a medical charity, that, forsooth, "he may have the pleasure of introducing me" to the newly elected president, Lord ——. In America, where the aristocracy are said to be at a premium, such an attraction may be all very well; but the gentleman in question will forgive me, if I say that in England such an invitation is in doubtful taste.

April 25th, 1861. F.R.C.S.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

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PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, May 1861.

COMMUNICATIONS have been received from:—Dr. THOMAS SKINNER; Dr. GRAILY HEWITT; Mr. G. LAWSON; Mr. PAGET; Mr. W. E. MANLEY; Mr. R. GRIFFIN; Mr. JOSEPH HINTON; Mr. J. MORLEY; Mr. T. TAPLIN; DR. LUCE; DR. WATERS; MR. T. M. STONE; MR. R. S. FOWLER; DR. DAVEY; and MR. WILDBORE.

BOOKS RECEIVED.

1. Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities. By C. E. Brown-Séquard, M.D., F.R.S. London: 1861.
2. Clinical Hospital, Fourth Sanitary Report. By J. Whitehead, M.D. Manchester: 1861.
3. Analytical Tables for the Use of Students of Practical Chemistry. By Murray Thomson, M.D., F.C.S. Edinburgh: 1861.
4. The Modern Pathology and Treatment of Venereal Diseases. By P. H. Watson, M.D. Edinburgh and London: 1861.
5. The Bath Mineral Waters in Cases of Rheumatism, Sciatica, Gout, etc. By R. W. Falconer, M.D. London and Bath: 1861.

ADVERTISEMENTS.

DR. SAMUEL WILKS'S LECTURES ON ANATOMY.
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LECTURES on Pathological ANATOMY; with Accompanying Tables: Being a Systematic Treatise on the subject, and a Complete Manual for Students. By SAMUEL WILKS, M.D. Lond.; Fellow of the Royal College of Physicians, Assistant Physician to Guy's Hospital, Lecturer on Pathology, and Curator of the Museum.

London: LONGMAN, GREEN, LONGMAN, and ROBERTS.

Practical Observations
ON
"SUPPORTING THE PERINÆUM."

BY
GRAILY HEWITT, M.D., M.R.C.P.,
PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL; LECTURER ON MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

[*Concluded from page 468*]

The Treatment of the Perinæum in Labour. With a view of arriving at some definite conclusions as to the proper treatment of the perinæum during labour, I have now carefully examined two questions. 1. The effects actually produced by the operation "supporting the perinæum"; and 2. The causes of laceration of the perinæum.

The result obtained by examination of the first of these questions was this: that the only effect which could be said to be produced by "supporting the perinæum" was, retardation of the advance of the head; and that, unless by the exercise of a considerable degree of force, even this effect would not be obtained. Further, it was shewn that other advantages which had been claimed for the operation, had no real existence. And it was also pointed out how retarding the advance of the head was likely to interfere with the mechanism of the natural process by which dilatation is brought about.

The results arrived at by an examination of the second question—the causes of laceration—was, that so far as it was possible to form a conclusive opinion on the matter, unusual rapidity of labour was one of the principal causes of the accident in question. It resulted, from an examination of the subject, that the causes of laceration were, however, very different in different cases; and hence the conclusion, that each particular case must be considered by itself.

What, then, is the practical result of this double inquiry into the value of the remedy—"supporting the perinæum," as applicable to the prevention of the evil—laceration of the perinæum?

It appears to me that the only conclusion we can come to is, that the operation must be rejected. Its object, if that object be limited to retarding the advance of the head, may be in itself good; but this particular method of attempting to gain that object is objectionable. In ordinary cases of labour, as a device for preserving the perinæum from laceration, I believe it to be practically worthless, and there are grave reasons for surmising that in many cases it has led to the very evil it was intended to prevent.

The arguments derived from a careful consideration of the mechanism of the process of dilatation of the perinæum and expulsion of head, all, in fact, lead us to the conclusion that the proper treatment of the perinæum in labour is, under all ordinary circumstances, to abstain from active interference of any kind.

Is the conclusion arrived at by reasoning, countenanced by the results of practice?

In the works of Denman, we find the following: —"When women were delivered without assistance, I have not, in any case, observed any considerable laceration." (Vol. i, page 60.) That the accident does occur, however, in cases where the delivery occurs unassisted is now well known. The explanation I have already given of this occurrence—that the laceration is due in these cases, not to the absence of assistance, but to the rapidity of the labour —I would now repeat.

Drs. McClintock and Hardy consider medical assistance so necessary, that they endeavour to explain why laceration does *not* occur in cases of unassisted labour, on the theory, "that inasmuch as these females are almost always involuntarily subjected to the deprivation we have mentioned, they habitually use their utmost endeavour to retard the birth of the child when they feel the head in the vagina, in the hope of aid reaching them before the critical moment of delivery; and another reason is that such patients have been spared the ill effects arising from vaginal examinations." (*Report, etc.*, p. 9.) It may, I think, be doubted whether patients do, as a rule, under such circumstances, exercise the kind of control mentioned. The exemption from laceration in such cases appears to be explicable in a very different manner. It is very certain that many deliveries, and rapid ones, do take place in the entire absence of all assistance, and with perfect safety to the mother, so far as the perinæum is concerned. The only conclusion to be drawn from the fact is, that assistance must be of little service in ordinary cases, seeing that no bad result usually ensues in extraordinary ones when it is absent.

We cannot, at this moment, procure any considerable numerical testimony as to the results of the non-interfering system; the practice of supporting the perinæum has been too universally adopted to allow of this being the case; but so far as the evidence procurable goes, it is calculated to give us every confidence in the resources of nature. Dr. West of Alford, and Dr. Swayne of Bristol, both assure us, from the results of a large number of cases, that the plan of "letting the perinæum alone" has with them given very satisfactory results.

Is there, then, nothing to be done to preserve the perinæum from laceration?

There are certain precautions which it is necessary to take, and to which I should be disposed to attach very considerable importance. When the head is passing through the vaginal outlet care must be taken that there be no impediment to its passage forwards. If the thighs of the patient be closed, and if the legs be in a straight line with the body, there may be an impediment of this kind, as in the case of Dr. Hall before alluded to, and the natural result is, that the fourchette is called upon to bear a much greater strain than is necessary. The practice adopted in France, of delivering the woman lying on the back with the legs separated, is the one best calculated to remove this source of danger to the perinæum. So, again, in the delivery of the shoulders, care must be taken to direct the delivery as much forwards as possible. It is very easy to see how infinite mischief may be produced by want of attention to this rule, and it is, in fact, extremely probable that laceration is not seldom due to this cause.

By adopting these simple precautions, I believe that the practitioner will do all that is possible to *prevent laceration* in ordinary cases.

Some other points, in reference to the treatment and management of the perinæum during labour, must now be considered.

Inunction. It has been recommended that the soft parts should be well and frequently lubricated with oil or lard during the last stage of labour, and with the view of promoting the stretching of the soft parts. It is difficult to see how such lubrication can relax the perinæum, or promote the stretching process ; it can do no more than render the surfaces to which it is applied smooth, and so far facilitate the passage of the parts of the child over the same. Like "supporting the perinæum," however, the practice of inunction has had an efficacy imparted to it which it is very far from deserving. There can, however, be no *objection* to using lard or oil, and when the parts are hot and dry, the patient certainly derives satisfaction therefrom.

Dilatation of the vaginal aperture is a procedure which was formerly much in vogue; the fingers being introduced in form of a cone, and the orifice thus dilated. Unless, however, such force were used as would be quite unjustifiable, little could be thus effected. The head of the child is the best dilator.

Dr. Snow Beck believes that, by preventing the perinæum from being pushed down before the head, and "by drawing it backwards and upwards over the protruding part, rupture may sometimes be avoided." (Brit. Med. Jour., March 10, 1860.) It is certainly a far more rational proceeding, as I have before shewn, to endeavour to procure dilatation in this manner, than to attempt to do so by pushing the perinæum forwards. The principle of the recommendation is undoubtedly correct, and, as I have before shewn, it was the principle of Rœderer and Hamilton; it is possible that the delivery may, in a few cases, be facilitated by the exercise of a slight distensive action in the direction indicated. The exercise of any degree of force would be, however, most objectionable.

In the next place, I would offer a few remarks on the treatment of the perinæum in cases where the labour does not come under the category "ordinary."

Supposing laceration to be impending, what is to be done ?

In the first place, what are the signs that laceration is impending ? This we must first determine. Now, I have attempted to shew that in what is called "rigidity of the perinæum" the condition present is one which is not calculated to excite apprehensions on this score, and having got rid of these cases, the number remaining is very few. I believe that the presence of *elasticity* of the perinæum is a sign of favourable import in the labour, and one which is indicative that laceration need not be feared. When the head recedes quickly after each pain, this indicates possession of elasticity. When such recession does not occur, when the pains are very violent, when the perinæal tumour has suddenly become much larger, and the parts are evidently very much stretched—if all these conditions are present together in a first labour, the practitioner may, perhaps, reasonably dread the occurrence of laceration. This I believe to be the most ordinary combination of circumstances under which laceration may be said to be imminent, and even these are very few and far between.

In such a case as the one just put, the obvious indication would, at first sight, seem *to retard the progress of the head.* I believe that any attempt mechanically to retard the progress of the head is objectionable, as well in cases of natural labour as in those cases where laceration is believed to be impending, and for the reasons which have already been stated. The chief of these are—1. That, by retarding the head, we lose the beneficial stretching action of the head on the perinæum ; and 2. Because the attempt is not likely to be successful in those cases where it would be supposed to be most required. It appears even probable that, by interposing actual mechanical resistance, the undue force with which the uterus is acting may be increased. In fact, most of the objections (not all) which applied to the operation "supporting the perinæum," apply equally to attempts to retard the progress of the head as a means of saving the perinæum from laceration.

The proper method of retarding the head, supposing it to be resolved to attempt it, would seem to be that recommended by Dr. Leishman ; namely, to oppose the fingers inserted within the vagina directly against the head itself. Pressure against the sacrum, also recommended by Dr. Leishman, appears to be useless for the purpose now in view.

A careful survey of the facts on record and the history of the subject generally, have led me to the conclusion that, where laceration is actually threatened, the proper treatment would be to procure additional space by making a slight incision into the stretched and dilated perinæal structures on each side of, and at a short distance from, the fourchette. Experience has shewn that incisions thus made subsequently heal with very great rapidity. The incisions are to be made so as to run no risk of injuring the rectum. Such a procedure as this will, I believe, be called for in an extremely small number of cases ; and here I would remark that the *so-called* cases of "rigidity" do not by any means come under the category of cases necessitating such treatment. The congenitally narrow condition of the vaginal outlet would seem to be the one most requiring it.

The subject of the treatment of cases of *rigidity of the perinæum* requires a few words. There may be *real* rigidity constituted by the presence of firm unyielding bands, cicatricial or otherwise, around the outlet of the vagina, or in cases where the vaginal orifice is naturally very small. For these very exceptional and rare cases, when a sufficient time has been allowed to elapse, incision is a proper remedy. I refer now, however, more particularly to the treatment of those cases more commonly met with, and to which I have previously alluded as cases of *so-called* "rigidity," where the perinæum is not dilated, because the force from above required for such dilatation has not been yet exercised ; these being cases, not of rigid perinæum, but of imperfectly acting uterus, or of obstruction from certain causes which I need not here again enumerate. We hear of certain remedies having a special power of relaxing the perinæum. I have no faith in the existence of such remedies, and interpret their action in a very different manner. The perinæum must be considered a passive agent in the matter. I believe that the remedies which are said to procure "relaxation," produce this apparent effect chiefly by rousing the uterus to greater activity ; the rigidity disappearing because a greater force is brought to bear on the perinæal structures. In cases of the kind now under consideration, the attention of the practitioner will be most profitably employed in ascertaining why it is that the head of the child is not propelled downwards with greater rapidity on the perinæum. In many of these cases of so-called rigidity of the perinæum, a careful use of the forceps is the best, the proper remedy, the uterine contractions being deficient in power.

The case which I have, in the course of the series of practical observations now brought to a conclusion, argued, is the one of rational *versus* empirical treatment of the perinæum during labour. I think there can be little doubt as to the nature of the decision, which will be formed by those who take the pains to consider the question attentively and dispassionately.

36, Berkeley Square, W., April 1861.

Original Communications.

CASE OF DEFERRED LACTATION.

By Thomas Skinner, M.D., Obstetrical Physician to the Liverpool Dispensaries.

I was lately called to a lady who had just had a severe rigor, and was threatened with inflammation of one or both breasts. The patient, who was the mother of several children, told me that she had had a miscarriage in Scotland about two months before, and that she had every reason to believe she was at the time in the seventh month of pregnancy. At the time of my visit, I detected a little milk in the breasts, and my patient informed me that the week before the occurrence of the "weed", she felt the usual sensation of a "rush of milk" to the breasts, and that milk was then secreted in abundance.

It is interesting to observe, that the date of these latter phenomena corresponds to what would have been the week following the full time of her late gestation. The lady had not been nursing, nor was it known that there was any milk in the breasts from the time of the miscarriage until the week before the rigor.

STRANGULATED OBLIQUE INGUINAL HERNIA IN A FEMALE: OPERATION: SUCCESSFUL RESULT.

By George Lawson, F.R.C.S., Surgeon to the Great Northern Hospital, Clinical Assistant to the Royal Ophthalmic Hospital, Moorfields.

The occurrence of strangulated inguinal hernia in women is so rare, that each case claims for itself a special amount of interest. The following are the particulars of a case which has lately been under my care :

Mary E., aged 56, married, the mother of one child, for the last ten years had suffered from an oblique inguinal hernia of the left side, which, she said, had been in the habit of coming down frequently. For the last three years she had worn a truss; but it fitted her badly, and often, when on, allowed the bowel to descend.

On April 2nd, the hernia came down as low as the left labium at about five o'clock in the afternoon. All her endeavours to return it failed, and she, consequently, applied to Mr. Dickinson, who used the taxis and the other usual remedies, but without success. Abdominal pain of a severe twisting character quickly came on, accompanied by severe vomiting.

At 12.30 a.m., seven hours from the descent of the bowel, and the commencement of the symptoms of strangulation, I saw her. The tumour was then of about the size of a large egg, very tense and tender, and occupied directly the site of the inguinal canal. Failing to return the bowel under the influence of chloroform, I at once operated. It proved to be an oblique inguinal hernia; and, as a division of the external ring gave no relief, and as the sac was much thickened and adherent to the surrounding tissues, I opened it, when the seat of the stricture was found at its neck. The bowel was immediately returned, but the sac was left *in situ*, and the skin closed over it. An opiate was given soon after the operation. The patient progressed most favourably; and, without the use of any purgatives, her bowels were freely opened on the eighth and ninth days after the operation.

April 24. She is now quite well.

Transactions of Branches.

EAST YORK AND NORTH LINCOLN BRANCH.

CANCER OF THE PENIS: AMPUTATION: RECOVERY.

By John Morley, Esq., Barton-on-Humber.

[*Read September 26th*, 1860.]

The subject of cancer presenting itself so often to our notice in its various forms and in different organs, although not so frequently (according to my limited experience) in the penis as in other parts, and the serious mutilation necessary for its removal, as in the following example, form my apology for bringing before my professional brethren what might at first sight appear to be a very simple case, but upon a correct diagnosis and treatment of which depended the retention or loss of the important organ involved.

I am not aware that I have anything novel to communicate; but, as I have been so ably assisted in the microscopical examination and illustration of the diseased parts by Dr. Munroe, I gladly avail myself of this opportunity of bringing the case before you, as an instance of the benefit to be derived from *association* in the cultivation of everything relating to our noble profession. The readiness with which the required help was rendered, deserves my warmest thanks; and I hope that the recital of the following case will draw forth from other members information on the subject, which will tend to advance our knowledge of the pathology and treatment of cancer in general.

Case. William Cook, aged 51, a pig-jobber, residing at Barton, married, first consulted me on May 1st, 1858, on account of a tumour situated on the internal aspect of the prepuce, which had latterly caused him a considerable amount of pain. He was the subject of congenital phimosis. He had syphilis about thirty years ago; since which period the inguinal glands had remained slightly enlarged. About five years ago, he observed what appeared to him to be a small wart near the extremity of the prepuce, which was attended with itching and smarting, and gradually enlarged to its present state. The extremity of the penis was inflamed and enlarged; and it was impossible to denude the glans; a hard tumour, however, could be detected by raising the skin between the finger and thumb.

On consultation with my friend Mr. Eddie (who also kindly assisted me at the subsequent operations) it was decided to excise the diseased portion of prepuce, which was done on May 6th. The glans at this time presented a mottled appearance (red and white) on the surface opposed to the preputial tumour. Water dressing was applied at first, until the rapid growth of fungous granulations rendered the application of nitrate of silver necessary; this failed, however, in arresting the disease. and at the expiration of two months he placed himself under the care of a surgeon in Holderness, by whom he was attended for about six months but without benefit.

On his return he consulted me again, the glans penis now presenting a fungoid appearance, with fistulous passages for the urine. I recommended immediate amputation of the penis, which he refused to submit to; and it was not until the end of June of the present year that he sent for me on account of profuse hæmorrhage, which was arrested by the application of tincture of sesquichloride of iron on lint. A recurrence of hæmorrhage a week afterwards compelled him to submit to amputation of the diseased organ, which was effected in the usual manner, about half an inch above the diseased mass. Three or four ligatures were applied, and an attempt was made to retain a tube in the urethra, but without avail, as it caused much irritation. Water-dressing was applied. The last ligature came away on the seventeenth day. The face of the stump was well covered; and he was able to pass his urine for some time freely; the orifice of the urethra, however, gradually contracted rendering the frequent introduction of a short bougie necessary. Notwithstanding this precaution, it became requisite to divide the cicatrix which had formed around the divided urethra, and insert a silver cannula. This last step was effectual; and at the present time he passes his urine in a fair stream.

His general health has improved, and at present there are no signs of a recurrence of the disease—the period, however, since the operation is so brief that nothing can be confidently stated on this head; if spared, however, the case shall be watched and duly reported—a result which cannot always be ascertained in hospital practice.

[Dr. Munroe, who had examinined the penis after excision, exhibited some beautifully executed drawings taken by the camera lucida from the microscope, varying from fifty to three hundred diameters. He showed the ichorous discharge which took place from the cracks or fissures to present the characters of cells obtained from epithelial cancer in other parts. In examining some very thin sections of the penis, the malignant character of epithelial cancer was distinctly shown extending from the superficial textures to those deeper seated.

He also spoke of the difficulty of defining clearly, even by the aid of the microscope, what structures were cancerous and what were not cancerous. In the present case, the microscopical characters were such as not to resemble any healthy texture.

After explaining some of the morbid appearances represented in the drawings, Dr. Munroe drew attention to the fact that epithelial cancer was the least prone to return; and also expressed his views on the pathology of cancer and cancerous growths.]

Quinine in India. In consequence of the enormous expense incurred by the Indian Government in the purchase of quinine (stated to be upwards of £40,000 annually in Bengal alone), a scheme has been arranged for the introduction of the cinchona plant in India, and accordingly the forests in the western slopes of the Cordillera have been searched for plants and seeds, and a double forcing-house was prepared at Kew for rearing the seeds, and, if necessary, nursing the sickly plants *en route* for India. The first cases of live plants arrived at Southampton last year, and have now reached the Neilgherry Mountains, but it is upon the seeds that the greatest reliance is placed; three large supplies of these were received at Kew in excellent condition, and a crop of seedlings has been reported by Sir W. J. Hooker to be flourishing there.

DR. BEALE'S LECTURES

ON THE

STRUCTURE AND GROWTH OF THE TISSUES OF THE HUMAN BODY.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, 1861.

[*Continued from page* 435.]

Although in many structures it is difficult to prove the existence of a cell-wall, in others there can be no question as to its presence. In the mildew it is distinct enough; but in the rapidly-growing parts of the plant the layer was exceedingly thin—so thin, that its existence could not be demonstrated; while in other specimens the thickness of the formed material was very great indeed. In the first instance the germinal matter was rapidly extending itself. In the last, in consequence, probably, of the existence of conditions adverse to the free growth of the plant, the germinal matter had slowly undergone conversion into formed material—a certain amount of nutrient matter was absorbed, so that the whole mass had greatly increased in size, but had the conditions been favourable, many times the quantity of formed material would have been produced in the same period of time, and this would have extended over a very much larger surface, and of course much more germinal matter would have been produced.

Dr. Beale then very briefly alluded to the cell theory of Schwann and Schleiden, and referred to a modification of Wolff's view which had lately been strongly advocated by Mr. Huxley, and had been made by him to harmonise with the notions entertained with regard to the nature of the intercellular substance. It is supposed that originally a clear homogeneous plasma is produced, in which spaces (vacuoles) are formed, and these contain, in the interior, the endoplast, consisting in fact of the primordial utricle of the vegetable cell, the cell-contents, and the nucleus.

The walls of these spaces are composed of the original plasma altered, which is termed the *periplast*, or periplastic substance. The greatest importance is attached to the periplast. It is supposed to possess the active power of growing and forming partitions, when division of the endoplasts occur, and of becoming differentiated into very important structures. The intercellular (periplastic) substance is considered throughout Germany as a most important structure, and it is generally believed that its peculiarities are not dependent upon the cells it contains, but are due to powers residing in it.

The lecturer read some extracts from Professor Huxley's paper on the cell-theory, and passed on to the opinions of Virchow who, on the other hand, attached the greatest importance to cells, which always came from cells, but he believed, nevertheless, that, "It is not the constituents which we have hitherto considered (membrane and nucleus), but the contents (or else the masses of matter deposited without the cell, *intercellular*), which give rise to the functional (physiological) differences of tissues." The cell is "a simple homogeneous and very monotonous structure, recurring with extraordinary constancy in living organisms."

Dr. Hughes Bennett holds, on the contrary, that cells can grow from a clear exudation; and he considers that granules first make their appearance, and that a cell-wall is afterwards formed around these.

Dr. Beale's conclusions did not permit him to agree with any of these theories. He had already alluded to the difficulty of demonstrating the existence of a cell-wall, and had shown that this is not a constant structure. So far from regarding the intercellular substance as the seat of essential changes, he endeavoured to show that it was the least active part of the tissues, and that it did not possess formative power at all. Neither did he think that cells effected any alteration in the substance external to them. Living structures are, he believed, quite incapable of exerting any important action on matter at a distance from them. Dr. Beale thought that the cell (elementary part) could not be formed from a fluid exudation; but he believed with Virchow, that in all cases cellular elements must have existed wherever cells were found. He considered that every organic compound in the body was once living, or was derived from a living structure. Albumen in the blood, as such, is not living, but it has been formed by living matter, and may again become living, if appropriated by a living structure.

Dr. Beale then enumerated a few of the appearances connected with the structure of elementary parts which may be readily demonstrated, and for the explanation of which we are endeavouring to frame a theory.

1. The presence of a distinct membrane (cell-wall), permeable to fluids, forming an investment to each elementary part, and containing within clear transparent or granular matter, at rest or in motion.

2. The absence of any such membrane over every part of the surface, so that protrusions occurring from different parts extend to a considerable distance, and where they come into contact, coalescence takes place, and then the most varied forms are produced.

3. A very thick external investment, perfectly homogeneous, granular, or in distinct layers, varying in thickness and density, or resembling each other in these particulars.

4. The formation of insoluble substances, as well as the presence of matter in solution amongst the living matter within the external membrane.

5. The presence of a large or small quantity of a peculiar material, homogeneous, granular, deposited in laminæ, or fibrous (intercellular substance), between the so-called cells or nuclei.

6. The absence of such a structure.

7. Elementary parts with nuclei and nucleoli, or destitute of both.

8. The formation of fibres projecting from the envelope of the elementary part.

9. The formation of fibres clearly prolonged from the substance of the elementary part, and composed of the same structure.

10. Elementary parts may begin their existence as minute masses of granular (germinal) matter. At a later period a membrane may be demonstrable. Afterwards, the membrane may become very thick indeed, so that a small cavity alone remains in its centre.

An elementary part may commence its existence as a very minute granule—too small to be seen even with the highest powers. It grows, and then exhibits an outer portion of different character to the material within. Changes may then occur in the inner material. Small bodies may appear, from which new growth may proceed at a subsequent period, and within these smaller particles may be evident. These clearly arise one within the other. The central mass may divide, and the resulting portions may divide and subdivide until an immense number of masses are produced. These may be quite separate from each other, or they may be included within the original capsule. In other cases there is no capsule, and the division and subdivision take place in a transparent, and more or less viscid substance, which lies between each resulting mass. In all cases the whole mass, and each component particle, consists of *germinal matter* and *formed material*. The latter forming a hard or soft external envelope, varying in structure, or a fluid or viscid substance external to the *germinal* matter, and sometimes also deposited amongst it.

The power of growth of the germinal matter of man and the higher animals, like that of the lower, is, there is reason to believe, also quite unlimited. Although this cannot be proved absolutely, Dr. Beale promised to bring forward facts which justified him in this statement. The conditions necessary for the growth of the germinal matter of the tissues of the higher animals are, however, so complicated, that the vitality of the germinal matter is much more easily destroyed, and it is therefore more difficult to study the alterations produced in the elementary parts, by modification of the circumstances under which they grow; still, by a minute examination of the morbid changes occurring in tissues in disease, or induced artificially, most important general conclusions have been arrived at, and there is the greatest encouragement to continue the same course of investigation.

Dr. Beale then passed round some specimens illustrating the character of healthy elementary parts of different ages from the more complex tissues.

If the elementary parts near the vascular surface of the skin, or a mucous membrane, were examined, the following facts would be observed.

1. They were much smaller than those near the surface.

2. Although very small, the proportions of the *germinal matter* to the *formed material* was very much greater than in the older elementary parts.

3. The formed material gradually increases as the elementary part grows towards maturity, the germinal matter absolutely increasing; but in proportion to the formed material it is relatively diminished.

After the elementary part has reached maturity, and has advanced some distance from the vascular surface, where it commenced its existence, the outer part of the formed material perhaps shrinks and becomes harder and drier, while the germinal matter gradually undergoes conversion into new formed material, until the proportion becomes very small, and the remainder, now at a long distance from the vascular surface, and separated from any nutrient matter, as, for instance, in the skin, by a hard dry mass of formed material, dies.

The rapidity of division of the germinal matter near the nutrient surface, and the formation of new elementary parts, is especially influenced by the amount of nutrient matter present.

18. A thin section of the tongue of a fœtus of the seventh month. The arrangement of the muscular fibres was well seen, and the papillæ were already developed as little simple elevations from the general surface. All the tissues consisted principally of germinal matter, and in every part of the specimen the number of these masses coloured by carmine was remarkable. The interval between the mucous membrane and the point of insertion of the muscular fibres corresponded to the corium and submucous tissue of the adult tongue. It was occupied entirely by oval nuclei, many of which were observed to be in lines, and these could be shown to be connected with the capillary vessels and nerves. No fibrous appearance whatever existed; and the quantity of formed material existing in connection with the germinal matter was very small.

This specimen of the tongue of a fœtus at the seventh month was contrasted with No. 19, which was a corresponding section from the tongue of a child ten years of age. Both specimens were under the same magnifying power. In the first, eight papillæ could be seen in the field at once with the submucous tissue, and many bundles of muscular fibres. In the last specimen, only three papillæ were included in the field, with a layer of submucous tissue and corium five or six times thicker than that in the fœtal tongue. The field was only large enough to take in just the pointed insertions of the muscular fibres, although the epithelium had been entirely removed, which greatly diminished the thickness of the specimen. The masses of germinal matter were numerous in the simple papillæ, and throughout the corium a number of transparent spaces or areolæ were observed, which were bounded by lines of small oval particles of germinal matter the so-called nuclei of the areolar tissue. The space which looked so transparent was occupied by a tissue which possessed a fibrous appearance, which was firm and unyielding, and which yielded gelatine by boiling. The whole of this tissue was generally called connective or areolar tissue, or "bindegewebe", and the nuclei which bounded the transparent spaces were dismissed by being christened areolar tissue corpuscles. They were supposed to take part in the development of this structure, which does not exist in the embryo, but which increases with age, and undergoes condensation as life advances.

Dr. Beale drew attention to the linear arrangement of these bodies in the papillæ, external to the capillary vessels, and immediately beneath the epithelium. These, he would show, were undoubtedly connected with nerve-fibres; and, from their position, it followed that if the capillaries were congested, these corpuscles would be subjected to slight pressure. In the areolar tissue there are also a number of masses of germinal matter, which are connected with the formation of adipose tissue.

Abstract
OF A
CLINICAL LECTURE ON PNEUMONIA.

By Austin Flint, M.D.

[The following abstract of a Clinical Lecture on Pneumonia by Professor A. Flint, is taken from the *American Medical Times*.]

The subject of pneumonia is of interest, because, by a kind of tacit agreement, this disease has come to be considered as a type of inflammatory affections generally; and the principles of therapeutics which are applied to this disease are considered as applicable to acute inflammation wherever situated. To a certain extent, this is undoubtedly correct; yet pneumonia presents some striking points of difference when compared with other inflammations. The inflammation is seated in a structure which is not a serous membrane, but which lacks the usual anatomical characters of a mucous structure; I refer, of course, to the membrane lining the air vesicles and the ultimate bronchial tubes. The inflammatory process here involves a solid exudation, which is probably derived from the blood coming from the right side of the heart, before becoming oxygenated, or, at least, at the instant of oxygenation. This peculiarity cannot possibly obtain in any other situation than in the air-vesicles and ultimate bronchial tubes. The exudation here never becomes organised, if it does elsewhere, as is generally supposed it may when it takes place on a serous surface. It is rarely converted into pus in this situation, if this conversion be possible elsewhere, as is generally supposed. The exudation does not remain as the tuberculous exudation does, in the same situation, but it is reabsorbed, often with great rapidity. Adhesion and obliteration of the cavities do not follow as in the case of serous membranes, but after the absorption of the exudation is completed, the pulmonary structure is intact, having received no appreciable damage. These are circumstances which are interesting, to say the least, in a pathological point of view.

During the present winter I have been interested in determining the increased weight of lung solidified by pneumonia. I have on the table before me the lungs from the body of a patient who died in a ward not under my charge, but the patient was seen by me before death, and the diseased organs have been kindly placed at my disposal. Over the entire right lung were presented the physical signs of solidification prior to death, and you see that it is perfectly solid. The affected lung is dilated apparently to the utmost limit of its expansibility, by the solidifying exudation. When I blow into the trachea with a pair of bellows, it remains motionless, while the left lung, which is free from disease and collapsed, expands readily. Separating these lungs from their connexion with the heart, and weighing them separately, I find that the solidified lung weighs *sixty-six ounces* more than its fellow! Now, the weight of the right lung in health, is somewhat greater than that of the left lung, but here is an enormous difference. The right lung has acquired a weight above that of health amounting to nearly or quite four pounds avoirdupois! To what is this enormous increase of weight due? Not to the presence of blood, for there is less blood in the diseased than in the healthy lung. It must be due to the quantity of solidifying exudation. Nearly or quite four pounds of the solid constituents of the blood, then, were withdrawn from the circulating blood in giving rise to the solidification in this case. I have weighed the lungs in other cases with similar results, and proportionately, where, instead of an entire lung, a single lobe only was affected by inflammation, This increase of weight of lung affected with pneumonia, is a striking fact and highly suggestive. Is the withdrawal of this amount of the solid constituents of the blood of no moment, so far as concerns the condition of the blood, the functions of the body, and the state of the vital forces? Can the blood sustain such a loss without any dangerous consequences resulting from it? We know that it is not necessarily fatal, because patients not unfrequently recover; but is not this a source of evil and danger which is to be considered in practice? Do we not find in this striking fact an explanation, in part, at least, of another fact, viz., patients with pneumonia affecting the whole of a lung do not generally die by apnœa, but by asthenia? The function of the affected lung is, of course, suppressed, while the solidification continues, but the function of the other lung is amply sufficient for the continuance of life. Patients do not necessarily experience even embarrassment of respiration from the solidification of an entire lung, but the pulse is apt to become frequent and full, the powers of life fail, and death ensues from exhaustion.

The history of the case which furnished this specimen was an illustration of the statement just made. Under a moderate use of opium, together with alcoholic stimulants, the respirations did not exceed sixteen per minute. There was no lividity of the face or prolabia. The pulse, however, was frequent and small, the patient was greatly prostrated, and despite the free use of stimulants and a sustaining diet, he sank more and more, and died from exhaustion.

The augmented weight of the lung in pneumonia is suggestive in another point of view. Notwithstanding the great amount of coagulated matter withdrawn from the blood, the coagulable constituent of the blood, viz., fibrine, does not appear to be diminished, but, on the contrary, increased. If blood be drawn during the progress of pneumonia, the amount of fibrine is found to be greater than in health; in fact, in this inflammation especially is the fibrinous element in excess. Does not this go to favour the hypothesis that the fibrine in the blood is excrementitious rather than the material for nutrition? And is not the greatly augmented quantity of the fibrine to be considered as expressing the waste of the tissues in this disease? This question is not without significance in relation to the *modus operandi* of certain remedies which clinical experience shows to be highly useful in the treatment of pneumonia.

There is no lack of opportunity, gentlemen, in this hospital, to observe cases of pneumonia in which the solidification extends over an entire lung. Examples are more numerous here than at the North, as I have shown by a comparative analysis of cases recorded in this hospital and at the hospital (vide *Am. Jour. of Med. Sciences*, Jan. 1861) in Buffalo. This fact explains, in part, the greater severity of the disease here, and the larger mortality from it. I have at this moment in my wards a patient who is just convalescing from pneumonia which has extended over the whole of the right lung, another patient who is nearly ready to be discharged, and another who is passing through the disease. Now, in these three cases the principles of treatment have been essentially the same. Many of you have observed these cases with me day after day, and have listened to the remarks which were suggested at the bedside. Let me state in a few words the principles of treatment which these cases have illustrated.

In none of these cases had the inflammation extended over the entire lung when the patient was admitted. It became thus diffused while the cases were under observation. Could this diffusion have been prevented by any plan of treatment? I am sorry not to be able to answer this question affirmatively. I have witnessed extension of the inflammation in cases in which different measures of treatment have been employed—such as bleeding, mercurialisation, and the free use of antimony; and I am obliged to say I do not believe that we have adequate evidence of the effectiveness of any particular measure or measures in restraining the inflammation within the limits of a single lobe.

Blood-letting was not practised in either of these cases. But observe, gentlemen, I do not take ground against the employment of blood-letting in any case of pneumonia. I believe this to be an extreme and injudicious view; but I do believe that in the great majority of cases, even when the disease is observed from the commencement, blood-letting is not called for, either because it is contra-indicated, or the objects to be attained by it can be secured by measures less open to objections, viz., by cardiac sedatives and saline laxatives. In the cases to which I am referring, even these succedanea of blood-letting did not seem to me to be called for. The disease had existed in all some days before admission, and the solidification had extended at least over an entire lobe.

Taking into view the history, the habits of the patients, the extent of lung affected, and the symptoms, the two following objects appeared to comprehend all that could be done to give the patients the best chance of recovery:

1. To place the patients under the influence of opium sufficiently to tranquillise the system—to render it, as it were, as tolerant as possible of the local affection, and to promote sleep. The objects embraced under this head are very important. When it is recollected that the disease kills by asthenia, all that we can do to obviate disorder, fatigue, and exhaustion, will be likely to increase the probability of recovery. Hence the value of opium in this, as in many other diseases. However we may explain the *modus operandi* of this drug, clinical experience shows its great value in the treatment of pneumonia. And it is to be borne in mind that in this, as in many other diseases, the system bears, without any narcotic effect, large doses of opium. These patients took, for several successive days, from nine to twelve grains of opium per day, without the least approach to narcotism. The good effects of this remedy must have been apparent to you in the diminished frequency of the pulse and respirations, the freedom from pain, the refreshing sleep which it procured, even while the local affection was advancing. I may repeat here, that it would be no objection to the use of opium, if it diminished expectoration in this disease, which it does not. The exudation in pneumonia does not go off by expectoration, but by absorption. One of the members of the class is now recovering from a recent attack of pneumonia affecting the whole of the right lung, and the resolution has gone on with astonishing rapidity; yet, in this case, during the whole course of the disease, there has been absolutely no cough and expectoration. The expectoration which usually occurs during the resolution of pneumonia, does not consist of the exudation into the cells, but mainly of mucus from the bronchial tubes.

I have offered reasons for the utility of opium; but you will bear in mind that its applicability in the treatment of this disease does not rest on the plausibility of these or any other reasons which may be given with a view to explain its utility, but on the conclusions drawn from repeated observation of its effect. It occurs to me to suggest, in connexion with the remarks which have been made respecting the probable derivation of the excess of fibrine from the waste of the tissues, whether opium may not be useful by limiting this waste; and, if, so, may it not tend to limit the amount of exudation, and in this way, in fact, limit the extension of the disease? I throw out this idea simply as a casual suggestion.

2. The second object was to support the system by alcoholic stimulants and concentrated nourishment. These measures constitute the sustaining course of

treatment of which I have spoken often in connexion with various diseases. The patients got an ounce of brandy at intervals varying from two to six hours during the progress of the disease, after the commencement of resolution; then the quantity was gradually diminished, and it was discontinued when convalescence was fully declared. Essence of beef and milk, alternately, at short intervals, constituted the diet.

Not many years ago, these measures during the continuance of an acute inflammation, would have been deemed extremely hazardous. The utility of the sustaining treatment in pneumonia, and many other affections, has become so familiar to me that I have ceased to regard it as possessing any novelty; but from the frequent expressions of surprise and doubt by practitioners who do me the honour to visit my wards, I am reminded that it is a novel treatment to many, and that all do not find it easy to shake off notions which have become firmly fixed. I shall not now dilate on the subject. You have had abundant opportunity to observe for yourselves in the cases of which I am now speaking, and in numerous other cases, not only the innocuousness, but the apparent efficiency of the free use of alcoholic stimulants and nutriment in certain cases of pneumonia, as well as of various acute affections. The safety and utility of these measures must, of course, rest on experience; but we need not be at a loss to understand, in some measure, why they are not only safe but useful. We have seen that in cases of pneumonia, in which an entire lung is solidified, sixty ounces of solid matter are withdrawn from the blood, and that the danger to life is from asthenia or exhaustion. Hence, it is the great object in such cases to support the powers of life, and this is to be done by alcoholic stimulants and nourishment.

There is another consideration which has an important bearing on this point in the treatment. Pneumonia, in general, does not involve destructive lesions of the lung, even when it proves fatal. The lung structure is intact. The cells are filled with exudation matter which will almost surely be absorbed if life be sufficiently prolonged. A grand object of treatment, therefore, is to prolong life until resolution begins and progresses so far that, if serious complications do not ensue, the patient is safe.

In these remarks, gentlemen, I have had reference to cases in which pneumonia extends over an entire lung. This diffusion of the disease, as you well know, renders the affection one of considerable danger, while there is very little danger if the disease be limited to a single lobe and not complicated with any other serious affection.

How the Old Egyptians Fed. "The Egyptians brewed beer from barley, baked bread from the meal of the lotos-seed, and distilled oil from olives. The immense richness of the soil, which in the Nile delta gave four crops a year, furnished abundant vegetable food, and the Nile furnished abundant fish. Upon fish, lotos, garlic, melons, and dates, the poorer classes chiefly subsisted. Those who could afford flesh, preferred the quail, the duck, the goose, and beef; very often the meat was simply salted, and eaten without further cookery. Not but what the Egyptian cooks displayed considerable ingenuity. Sir Gardiner Wilkinson's researches show them to have understood various modes of preparing dishes, especially of pastry. The drinks were numerous. It was the custom during a banquet to carry round a coffin, containing a painted corpse, made of wood, which was shown to each guest, as a memento that he, too, must one day die, and that the best thing he could do was to enjoy the present moment. The Egyptians sat at table, and used a wooden or ivory spoon to aid their fingers. Dances and music enlivened the meal." (*All the Year Round.*)

Reviews and Notices.

Essays and Observations on Natural History, Anatomy, Physiology, Psychology, and Geology. By John Hunter, F.R.S., being his Posthumous Papers on those Subjects, arranged and revised, with Notes: to which are added, the Introductory Lectures on the Hunterian Collection of Fossil Remains, delivered in the Theatre of the Royal College of Surgeons of England. By Richard Owen, F.R.S., D.C.L. Vol. I, pp. 403. London: 1861.

The publication of the posthumous works of a man who has made for himself a great name, is an event which is always regarded with much interest in the world of literature and science. But to the present volumes there is an especial interest attached. The writings, of which they contain the greater part, were supposed to have been lost to the world through an act of wanton destruction on the part of one who should have held the duty of their preservation as a sacred trust. Recent years, however, have brought to light the fact, that the greater part have been preserved, through what we may almost regard as the filial reverence and prescient care of a young man associated with the author of the papers as his amanuensis and assistant. In his leisure hours he copied large portions of the manuscript of his master; and, in his old age, placed the treasure, carefully guarded through upwards of half a century, in the hands of one in whom both he and the whole scientific world could have confidence as willing and capable to do fitting honour to a great name.

The posthumous papers of John Hunter come before the world under the editorship of Richard Owen—and none more worthy to put them forth could be found in this land: but it must never be forgotten that it is to William Clift that we are indebted for their preservation.

But, now that these recovered writings of John Hunter are brought into the light of day, how shall they be read? If they had emanated from one of less fame, this question would scarcely be necessary; but, as they are the records of the thoughts of a man whose name has been placed in the foremost rank of those which we delight to honour, is there not some danger lest, in blind veneration, we make the man the standard by which to measure the works? There is so much of hero-worship in science as well as in other matters, that we cannot forbear a word of protest and caution. Doctrines even opposed to facts are obstinately upheld, merely because they have been enunciated by some one whose renown is great among the greatest in the scientific world. But this is a total reversion of the normal process. Whatever of scientific truth man brings to light, is but a portion of what has been determined by the laws of the Great Creator, and left to human intellect to discover. He who does most in this direction is deserving of honour; but still he is fallible, and may not always rightly interpret that which is presented to his view. To hold him up, then, as infallible, to regard doctrines as absolute because *he* has uttered them, is to invest him with attributes nothing short of superhuman. No! it is not the man that makes the science; it is the science that makes the man.

Hunter was preeminently one of those men who can best afford to be measured by the standard of his works, and whose reputation stands least in need of that spurious hero-worship which we have reprobated; although, it must be confessed, he has received a considerable share of it. But the most full and free exercise of the intellect in judging his works, the most unsparing rejection of any and every opinion of his which does not appear to stand test, does not in the least diminish our admiration of the man. Intellectual power such as few possess, was his. Its range was vast—for it embraced nothing less than the terrestrial world and all things therein; taking cognisance alike of the small and of the great. And in the manifest evidence before the world, that to this high mental power he added an undeviating will to use it in the investigation of the unseen or dimly discerned secrets of Nature, we have the true and firm groundwork of a lasting fame.

Considerations of this cast might have been well evoked, and, for aught we know, have been evoked, by the contemplation of the works of John Hunter as they have been hitherto presented to us. But, if our admiration for his energetic intellect can be increased, it must be increased by the study of the volumes of his writings which have lately been put forth. Let us look into them, and try to give an idea of what they contain.

As the title-page says, these newly published volumes are the "posthumous papers of John Hunter on Natural History, Anatomy, Physiology, Psychology, and Geology." We will briefly notice each of these divisions.

In the Observations on Natural History, a vast range of subjects is discussed. These, following in part the editor's arrangement, include the Origin of Natural Productions and of Species and Varieties; the Development of Natural Science; the Properties, States, and Species of Matter; the Principles of Classification; Animal Matter; the Distinctions between Animals and Vegetables; the Point of Connexion of, and the Mutual Dependence between, Animals and Vegetables; Motion in Vegetables; the Study of Natural History; and the Classes of Animals.

The section which has been placed at the commencement of the work shows that Hunter's inquiring mind took cognisance of the great question which has of late been agitated—the origin of the different forms of animals.

There is a paragraph to which we would at once call attention; as it is possible that, from an isolated perusal, a hasty and incorrect conclusion as to his views may be arrived at.

> "Does not the natural gradation of animals, from one to another, lead to the original species? And does not that mode of investigation gradually lead to the knowledge of that species? Are we not led on to the wolf by the gradual affinity of the different varieties in the dog? Could we not trace out the gradation in the cat, horse, cow, sheep, fowl, etc., in a like manner?" (P. 37.)

There is nothing here or elsewhere in Hunter's works, as far as we can see, to lead to the conclusion that he had any idea of carrying the doctrine of the origin of the species to the extent to which it has been carried by some in modern days. Far from dogmatising on the subject from hypothetical data, he rather puts the question forth as one not likely to receive solution. Even with regard to the much more simple question of the origin of the varieties of animals, he uses great caution. He shews (pp. 2 and 3) that "the study of Natural History is an effect of considerable advancement in civilisation and in the cultivation and improvement of natural things; and, therefore, the study is posterior to those advancements." The study of natural history must, as a corollary to this, be founded entirely on observation; and, where observation is wanting, he is sparing of hypothesis.

> "If the study of Natural History had been coeval with its own advancement, and had that advancement been communicated to the world, as it arose," (Mr. Owen in a note explains this to mean "If the study of Nature had been coeval with the changes in Nature, and those changes had been recorded as they arose,") "for the benefit of mankind, we should not now be at a loss to account for many appearances that owe their birth to changes that have taken place in the productions of Nature by Time, of which we are at present ignorant. But, as the advancement in knowledge had gone considerable lengths before the certain means of communicating it were known, as also what may be called a permanent mode of communication—and as, where those means were known yet a disposition [to use them] was wanting, [there being] besides, a degree of superstition and a bias for the marvellous, which is always introduced with ignorance—it is no wonder we are left in the ignorant state we are in at present.
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> "Therefore, to make up the loss as much as possible, it is incumbent on us to go back as far as our knowledge directs us; to compare those [states of things] with great accuracy with the present; and to mark down what state things are now in; [in order] that future ages may be able to account for what we are ignorant of. For, by their being acquainted with what has happened within the History of Natural Things, the state that things were in prior to such inquiries—those changes prior to the present—may be hereafter tolerably well accounted for." (Pp. 3-4.)

This last paragraph may be regarded as indicating Hunter's idea of the object to be held in view in the study of natural science. The object is simply this: to observe and record faithfully that which is presented to our notice, in order that those who come after us may have a reliable standard with which to compare what they observe, and thus perchance be enabled to solve some of the problems which now fruitlessly agitate the mind for solution. Mere speculative hypothesis, and still less dogmatism founded thereon, has no place here; observation alone must guide.

In regard to the Classification of Animals, Hunter is suggestive rather than positive. He saw plainly on how purely artificial a basis rested the systems of classification which had been attempted. His theory of the cause of this defect appears in the following quotation:—

> "Writers on the Natural History of Animals have been of two kinds—one [concerned in] only what they could observe externally, such as form and mode of life; the second [studying only] the internal parts and the structure of the whole animal, which was performed by the anatomist. As the [subject of the] first has an immediate connexion with [that of] the second, the describers of form conjectured what the structure ought to be by consulting the works of the anatomist; and the anatomist conjectured what the living history is or ought to be from the Natural History of the others; filling up

> what he conceived to be just, and fancy supplying the rest. But such union of knowledge does not properly match. It is one building built at different times—an addition to an original plan. It is no wonder, then, that the whole is imperfect.
>
> "This [partial or restricted study] confined them very much in their mode of classing or arranging. Thus, for instance, Linnæus, catching the idea that all the animals which were formerly called 'Quadrupeds' had mammæ, therefore called them by that name [mammalia] which included the whole. But from the want of further knowledge he has divided these again according to the situation of those parts; bringing, for example, the human kind, the elephant, the bat, etc., into one order, whereas he should only have reduced the situation of the parts themselves into different classes; [thus classifying nipples] according to situation but not [to have] classed the animals according to those situations." (Pp. 24-25.)

Hunter's idea of classification was evidently, that it should be founded on the modifications of some great organ, or function, and not on mere external characters. As to the manner in which this might be done, several plans appear to have been present to his mind; and accordingly we find him sketching classifications of animals according to the number of cavities in the heart; according to the breathing organs; according to essential and circumstantial characters; according to brains; according to modes of generation; according to coitus; according to temperature; according to size of body; and according to the element inhabited. Of these methods, the last four are dismissed with a mere outline; the classification according to "essential and circumstantial characters" is elaborated to some extent, but ends rather abruptly at the amphibia; while the classification founded on the nervous system is worked out in such a way as to render it almost evident that it was this system on which Hunter depended most for a solution of the problem. And further, the specimens Hunter left in his museum as illustrating the condition of the several classes, taken in conjunction with his notes, indicate an anticipation by him of many of the conclusions arrived at by subsequent naturalists. For instance, as Professor Owen observes, he appears to have had a perception of the great natural subdivision *mollusca*. These notes of John Hunter on classification, apart from their real scientific value, are very interesting; as shewing how he perceived the difficulties of the subject, the errors in the attempts which had already been made, and the general principle which should guide in the solution of the problem; and how he seems to have noted down tentative plans, apparently giving the preference to a groundwork for classification which is now universally recognised as the basis of any arrangement of the animal kingdom for the purposes of scientific study.

The superiority of man in the animal kingdom forms the subject of several pages of the work. *Mind* is the characteristic first put forward.

> "Man adapts the instinctive principle to the situation or to the whim. He must eat; but he varies the mode of eating; he takes the advantage of circumstances and applies them; he takes the advantage of all nature. Each bird builds its nest in a way peculiar to the species. Man builds his, but he does it in a way most suitable to the situation or pleasure.
>
> "Nothing shows more the superiority of the human over the brute, than the variety of ways in which he shall perform any natural and instinctive action." (p. 40.)

The superiority of man according to frame is then examined; especially with regard to the now debated question of the difference between man and monkeys.

We find now a series of Observations on Natural History; the mere examination of which will aid in shewing the extent to which Hunter took cognisance of small details as well as of great principles. The topics here noticed are: the uses of animals to man; the sociability of men and of animals; the manners of young animals influenced by their parents; the natural disposition of animals toward one another; the combative principle in animals; the rising of animals; progressive motion of the newt; on horses; on the effects that medicines have on horses; the ass; economy of crows; of humble-bees; of hornets; of wasps; and of beetles; the grasshopper; the dragon-fly; the *tenthredo abietis;* the white evening moth; the white butterfly; the ant; the *musca tenax*; the gnat; bugs; the external characters, senses, nourishment, digestion, teeth, weapons, heart, blood, circulation, and respiration of insects; the water-spider; the river crawfish; economy of earthworms; and the geographical distribution of animals. The notes contained under these heads—especially those on the economy of various insects—are the records of a series of minute observations of detail. In remarkable contrast with this stands out the commencing part of the next chapter, in which Hunter attempts to deal with one of the most difficult subjects of which the mind of man can undertake the examination.

But we must defer a further notice to another number.

[*To be continued.*]

A Practical Treatise on Diseases of the Skin in Children. From the French of Caillault. By R. H. Blake, M.R.C.S.E. Pp. 277. London: 1861.

Skin-diseases are more frequent in childhood than at later periods of life; and there is, therefore, something which manifestly renders this part of the body especially sensitive in early life. It is, therefore, very reasonable to treat of these affections as they present themselves to our notice in childhood, considering them as being in some important particulars different from the skin-diseases of later periods of life. This appears to have been the idea of M. Caillault.

M. Caillault resided for two years in the Hospital for Sick Children in Paris, and it was there that he gathered the materials embodied in this volume. It was there also that he satisfied himself that this class of diseases exhibits, during infancy, peculiarities sufficiently important to deserve a special description.

We have no hesitation in saying that M. Caillault has well performed a very difficult task. Notwithstanding all that has been written on the subject of skin-diseases, it is a fact that the literature, like the medical treatment of these diseases, still remains in a very unsatisfactory state. We will not say that M. Caillault has made the most philosophic divisions of his subject; but, perhaps, it is impossible to make such divisions of it in the present state of the study. He would, perhaps, have done better to let the diseases stand according to their separate forms, than to attempt the grouping of them together into unnatural and artificial alliances. A glance at his table will show how extremely artificial this grouping is.

He has, however, certainly treated the separate affections of the skin in a very lucid manner. The work bears the stamp throughout of genuine observation; and, we may add, Mr. Blake has well performed his office of translator.

Progress of Medical Science.

Tumours on the Sheaths of Vessels. M. Langenbeck discusses the subject of tumours in the neighbourhood of large vessels, with special reference to the important question as to how far the vessels are involved, and whether extirpation is or is not practicable. In general, growing tumours, such as swellings of the thyroid body, only push aside the large vascular trunks. Carcinoma and medullary sarcoma may rapidly invade all the neighbouring tissues, and even the vessels themselves. Dermoid cysts, sarcomatous tumours of glands, and epithelial cancer, frequently from the commencement have adhesions to the sheaths of vessels, and probably arise from the areolar tissue or lymphatic glands in contact with the sheath. Further researches are required on the connection of dermoid or atheromatous cysts with the walls of the vessels. Thiele had a case in which the cyst had adhesion to the carotid; and Adelmann one, where the cyst was firmly united to the sheath of the carotid and jugular. In two of Langenbeck's cases, an atheromatous cyst was distinctly connected with the sheath of the jugular vein. Sarcomatous tumours of the lymphatic glands and epithelial cancer grow more frequently than atheromatous cysts from the sheaths of the vessels, especially of the veins. The sarcoma may attack a number of the glands around a large vein at the same time, and may include the vessel. When a tumour, springing from a firm base (as the vertebral column), can grow in one direction only, it pushes the *veins* towards the surface. In extirpating a large glandular sarcoma from the neck, Langenbeck found the common jugular vein considerably raised, while the carotid artery had not changed its position. Sarcoma of the lymphatic glands has, as a rule, no tendency to contract adhesions with the neighbouring tissues, or to perforate the veins. Epithelioma, on the other hand, springs from the lymphatics lying on the sheath of the vein, and becomes adherent to the vein and to the sheath of the neighbouring artery; the vein is soon penetrated, while the artery remains unhurt, or is attacked only at a late period.

The exact diagnosis of tumours connected with the sheaths of vessels is important. Atheromatous cysts have hitherto been observed only in the neighbourhood of the great vessels in the upper division of the anterior triangle of the neck. These tumours are round or oval, with a flat surface; their contents are pultaceous, and fluctuation is distinct if the tumour be fixed by the finger introduced into the mouth, while pressure is made on the outside. The pulsation of the carotid is felt to the inner side; and, if the head be bent backwards, the pulsations of the vessel are communicated to the tumour. Sarcoma of the sheaths of the vessels presents the same appearances as sarcoma of the superficial glands; it is originally soft and elastic, lobed on the surface, moveable, and painless; but it may, in consequence of inflammation, become hard and immovable, and even be the seat of constant pain. Its origin from the sheath of the vessels can seldom be recognised; but large sarcomatous tumours have been known to raise and draw forward the internal jugular vein, and yet have remained very moveable. Indications of obstruction to the circulation in the subcutaneous veins are observed only when the sarcoma is superficial. Epithelial cancer of the sheaths of the vessels of the neck has well-defined characters. It appears only in advanced age; it is developed in the middle of the neck, near the larynx, from the lymphatic plexus over the jugular vein; it grows rapidly, becomes united to the muscles and fascia, and is immoveable. At first hard, it afterwards attains a doughy consistence, and often presents distinct fluctuation. Almost from the first the tumour is the seat of spontaneous pain, which may become frightfully intense. Attacks of giddiness, sensation of pressure, and œdema, are observed; and if the tumour press towards the throat and larynx, there are changes in the voice, and difficulty of breathing and of swallowing. The vagus and phrenic nerves appear to remain long unaffected.

Extirpation of tumours on the vascular sheaths is among the most difficult and dangerous of operations. In atheroma, the surgeon is in the unfortunate condition of being obliged to undertake a dangerous operation for a trifling disease; and hence extirpation can only be indicated when all other means of destroying the cyst have proved useless, or are likely to be as dangerous as extirpation itself. In sarcomatous tumours of the glands, Langenbeck prefers extirpation to any other means. In epithelioma arising from the sheaths of the vessels, extirpation is the only remedy; but, in performing the operation, the surgeon must be prepared to extirpate the carotid artery and jugular vein at the same time. In operating, especial care must be taken to avoid excessive loss of blood during the operation, profuse hæmorrhage from wounded arteries, and entrance of air into the veins. These accidents Langenbeck has hitherto avoided; by, he believes, attention to the following rules.

The incision in the skin must be made so as to enable the surgeon readily to reach the deep parts. It is best to remove an elliptical portion of skin; when a large tumour is adherent to the muscles, the skin is raised in flaps, the edges are turned outwards, and the dissection is commenced from the lower border. The subcutaneous veins should be first tied in two places; after the operation, the ligatures may be removed. In isolating the tumour, if the vessels be not adherent to it at the central end, they are here separated and held aside by the finger. When there is adhesion of the tumour to the sheath, the latter is opened, and is isolated with the tumour from the vascular trunks. If the tumour have grown through the vessels, two ligatures are applied at the central end, and the vessel is cut through between them; the tumour is then raised, and ligatures are again applied at the peripheral end. The division of the deep-seated tissues is best performed, as Dieffenbach has taught, by means of scissors. The entrance of air into the compressed and injured veins is avoided by commencing at the central end and following the course of the venous branches. An assistant should always be ready to apply pressure to the veins or arteries, if required. (*Archiv für Klin. Chir.*, vol. i, part i, 1860; *Schmidts Jahrbücher*, vol. cix.)

Treatment of Symblepharon. Dr. Hays, in a case of extensive symblepharon of both lids from the action of lime, employed with success the following plan. The lid being separated from the eyeball, a portion of tinfoil was placed in the wound, and bent over the edge of the lid; and strips of isinglass plaster were applied so as to keep the lids together and the metal in its place. The tinfoil was renewed every day. Both lids were operated on in succession, with a successful result, except at the inner angle, where it was difficult to keep the tinfoil properly applied. (*Amer. Journal of Med. Science*, January 1861.)

The Uses of Anæsthetics in Strangulated Hernia. Dr. Streubel of Leipzig, at the conclusion of an article on the taxis in hernia, expresses his want of confidence in venesection and the administration of sedatives by the mouth or by injection as aids of this measure. Of anæsthetics, however, and especially of chloroform, he has a very high opinion. Chloroform, he says, has so often proved the most powerful and appropriate auxiliary of the taxis, that it ought to be brought into use in all cases where a gentle application of the taxis has failed. In administering the anæsthetic, its effect must be pushed to the production of relaxation of the muscles; and therefore the ordinary precautions must be carefully observed in its use. The narcotised patient, having lost the control over his muscles, can no longer offer opposition to the taxis by muscular resistance or by movements of any kind. The abdominal muscles, in place of being contracted as the reflex effect of pain, are relaxed; and the cavity is more roomy. Before giving chloroform, the surgeon often is not able to reach with his finger the seat of constriction, if it lie rather deeply; but, after the use of chloroform, he can reach it so as to apply the required pressure. Chloroform anæsthesia is also very useful in the examination of the case. When the constriction lies deep, and the coverings of the hernia are thick, energetic attempts at the taxis are so painful to the patient, that even the surgeon may be prevented from applying the pressure in the proper way and for a sufficient time. Again, chloroform surpasses all the other so-called auxiliaries of the taxis in the rapidity of its operation and in its freedom from danger. The use of chloroform is especially advantageous in cases of acute strangulation with great tenderness, where the patients can scarcely bear to be touched, and where formerly it was the practice to endeavour to reduce the excessive sensibility by various uncertain and dangerous means, thereby losing time, and at last rendering the strangulation ungovernable. Finally, the use of chloroform affords an indication in regard to herniotomy. If the taxis, applied during anæsthesia, have failed to reduce the hernia, the surgeon may be sure that no other remedy is likely to be of any service, and the course pointed out to him is herniotomy. The presence of disease of the heart or lungs, or other contraindications to the use of chloroform, are, in Dr. Streubel's opinion, the only circumstances in which the surgeon is obliged to adopt the use of other more uncertain auxiliaries in a case of hernia. (*Prag. Vierteljahrsch.*, 1861, vol. i.) The observations of Dr. Streubel agree very closely with the remarks made by Mr. Bryant of Guy's Hospital, in a paper read before the Medical Society of London a few weeks since. (See Brit. Med. Jour., March 23.)

Hæmoptysis, according to Skoda, is a result of capillary hæmorrhage, or of the laceration of larger vessels in different parts of the breathing apparatus; but the most copious hæmorrhage generally occurs only in ulceration of the larynx, in the formation of caverns, and in dilatation of the bronchi. Laryngeal hæmorrhage may, except in hooping-cough, be regarded as preceding or accompanying laryngeal or pulmonary tubercle; but in the absence of this, and especially if the hæmorrhage return frequently and the patient be somewhat advanced in years, there is a probability of cancer being present. Tracheal and bronchial hæmorrhages are distinguished from capillary bleeding with more difficulty than the laryngeal hæmorrhage. With the exception of hooping-cough and scurvy, hæmorrhage from the respiratory organs occurs most frequently in phthisis; and in the latter disease the appearance of hæmoptysis may be regarded as a sign of the progress of the disease: this observation is applicable to capillary hæmorrhage. Bleeding from the larger vessels in the larynx occurs as a result of tubercular, typhous, or even cancerous ulceration. In the trachea, profuse hæmorrhage is produced only by aneurism or by cancer: in the bronchial tubes, it is produced by dilatation, or by perforation from a cancer, aneurism, or cavern. Traumatic hæmorrhage from the lungs is not of much importance; nor is the hæmoptysis which attends spasmodic cough, the acute exanthemata, or incipient typhus. Heart-disease leads to infarction of the vessels, but not to proper hæmorrhage. As a general rule, hæmorrhage from the air-tubes indicates the presence of tubercle; and when it takes place from the parenchyma of the lungs, and is considerable in quantity, there is dulness of the percussion-sound over the part. But if, after a copious hæmoptysis, the sound remain clear, the blood has probably come from the trachea or bronchi. Hæmorrhage in the larynx produces a tickling sensation, from the dropping of the blood. The colour of the blood is no guide as to its origin; for sometimes blood, bright red when first discharged, becomes darkened by remaining in the air-passages. (*Allg. Wien. Med. Zeitung*, 1860; and *Prag. Vierteljahrsch.*, 1861, vol. i.)

Diseases of Looking-Glass Makers. These have been investigated by Dr. Joseph Keller, in some mirror-manufactories in Bohemia. In a well ventilated room, finely polished marble plates are covered with tinfoil, and on this some mercury is poured and rubbed off by means of a piece of wood wrapped in flannel; more mercury is then poured on, and the glass is placed horizontally on it, the mercury which runs over being caught in vessels. The glass plate, thus covered, must be left for a while, and then stood in the same room to dry for twelve or twenty-four hours. No food is allowed to be taken in the workroom: the workmen, who are mostly from 16 to 24 years old, are obliged to wash the mouth out at least twice a day with an astringent water. They work eight hours a day; and, after a period of not more than a fortnight, they must leave the work during from eight to fourteen days. All these workpeople are diseased. In the very first weeks after their entry, grey deposits are formed on the teeth; the mucous membrane of the mouth becomes red and swollen; and, at a later period, excoriations appear on the lips and gums, with ptyalism, loss of smell, hoarseness, ulceration, and swelling of the lymphatic glands and of the tonsils. With the exception of the new-comers, all have ulceration of the fauces. Tremblings of the extremities, nocturnal pains in the head and in the limbs, loss of teeth, and swellings of the bones, gradually appear. Deposits are more frequently met with on the tibia than on the humerus or head. Macular, papular, and scaly eruptions often appear suddenly, then disappear, and again return. These symptoms are not confined to those directly engaged in silvering the mirrors, but are met with also in those who have left the work four, five, or even ten years. Abortion was so frequent in pregnant women, that now no married persons are admitted to work in the manufactory. The children of the former workpeople often present an anæmic and scrofulous condition. In the treatment, Dr. Keller recommends simply eliminative salts, warm baths, and abundant exercise in the fresh mountain air of the country. (*Wien. Med. Wochenschr.*, 1860; and *Prag. Vierteljahrsch.*, 1861, vol i.)

Internal Administration of Chloroform. MM. Bonnet and Debout recommend glycerine as a vehicle for the internal administration of chloroform. M. Bonnet gives the following formula:—Glycerine, 30 parts; chloroform, 2 parts. Mix, and keep in a well stopped bottle. The dose is a teaspoonful in a glass of water, or of some cold infusion or mixture. The glycerine must be pure; that known in Paris under the name of "English glycerine" (*glycerine Anglaise*) should be employed. (*Bull. Génér. de Thér.*, 15th April, 1861.)

Nature and Treatment of Asthma. A new theory on asthma has been put forward by Dr. Duclos of Tours, who maintains that it is a manifestation in the air-tubes of a herpetic diathesis. He says that he has generally observed in asthmatic patients either that they have had attacks of cutaneous disease of varying degrees of intensity, or that they were the offspring of parents who had a proclivity to cutaneous disease. The varieties in asthma, he believes, are connected with various forms of skin-disease. The simple fugitive eruption of urticaria is represented by attacks of asthma of short duration and rapid recurrence; the eruption of erythema by more persistent and prolonged asthma, having more of a remittent character; and that of eczema by continuous asthma, with much bronchial secretion, having at the same time intermittent exacerbations. The treatment adopted by Dr. Duclos consists in the use of sulphur, of which from eight to fifteen grains, according to the age of the patient, are given every morning during or before breakfast. The medicine is continued twenty days in the month for five or six months, and, after this, ten days in the month during a year or a year and a half. He says he has obtained some remarkable results from this treatment. In the more obstinate cases, he gives Fowler's solution in doses of two drops night and morning, gradually increased to six drops. At the end of three months, the arsenic is suspended for a month; but its use is arrested at any time if any troublesome symptoms appear. (*Bull. Génér. de Thér.*, 15 April 1861.)

Fungus Hæmatodes of the Uterus and Ovaries in a Child. The patient, a child aged 12, under the care of Dr. Corse, complained of colicky pains, which were at first treated by domestic remedies. Subsequently, an abdominal swelling was discovered, and Dr. Corse was called in. There was found to be a tumour descending low into the pelvis: it was diagnosed (we are not informed on what grounds) to be fungus hæmatodes. The abdomen of the child became so much distended as to interfere with the breathing. Tapping, as a palliative, was performed about two inches below the umbilicus; and about three pints of ropy sanguineous fluid were removed, with the result of alleviating the symptoms for a short time. The fluid was found to contain cancer-cells. The patient died five or six weeks after the disease was first noticed. On *post mortem* examination, the abdomen was found filled with a soft cancer-matter, extending up between the stomach and diaphragm. The uterus and ovaries formed one soft mass. The cancerous matter was attached to the walls of the abdomen; and numerous tumours of all sizes, from that of a small shot to an inch or more in diameter, were found attached to the omentum, mesentery, and intestines. The whole of the substance was calculated to weigh fourteen pounds and a half. There was no history of hereditary predisposition to cancer. Menstruation had not appeared. (*American Journal of Medical Science*, Jan. 1861.)

Sulphate of Alumina and Zinc. Dr. Homolle has brought under notice, for therapeutic uses, a compound of sulphate of alumina (not our ordinary alum, or sulphate of alumina and potassa) with zinc. The compound is made by adding 60 parts of white oxide of zinc to a solution of about 600 parts of sulphate of alumina in 1000 parts of water. Solution takes place, with evolution of heat and carbonic acid; the liquor is opaline, with a slight greyish deposit; the specific gravity after filtration is 1,385. This solution may be formed into pastilles with some gummy powder; or it may be mixed with glycerine; or it may be formed into an ointment by adding one part to two of sweet almond oil and eighteen of cerate. M. Homolle believes the sulphate of alumina and zinc to have a beneficial action in producing modifications in the state of the tissues in the following conditions: 1. Anginæ of the tonsils and pharynx; 2. Hypertrophy of the tonsils; 3. Mucous polypus of the nasal fossæ; 4. Ingrowing of the nails; 5. Scrofulous ulcers; 6. Nævi and vascular vegetations; 7. Inflammatory affections of the neck of the uterus; 8. Displacements of the uterus; 9. Cancers and canceroid ulcers. Coincidently with the local action of the remedy, M. Homolle says, the cachectic tint disappears; strength, appetite, and sleep return; gastralgia and dyspepsia cease; and the general health altogether appears sufficiently improved to give room for the hope of a cure. (*Bull. Génér. de Thér.*, Mars 30, 1861.)

Coincidence of Insanity with Mollities Ossium. From the observation of two cases, Dr. Finkelnburg concludes that insanity is sometimes connected with mollities ossium. In each instance, the commencement of the psychical disturbance coincided with the acute stage of the disease of the bones; and there was an absence of otherwise sufficient causes of mental disturbance, especially hereditary predisposition. The course of the insanity was remittent; it commenced as melancholia, which passed into incurable lunacy with hallucinations. In the second case, the psychical symptoms were ushered in by idiopathic cerebral irritation and partial paralysis. Dr. Finkelnburg conjectures that the softening process involved the base of the skull, that the basic portion of the occipital encroached on the skull-cavity, and that the walls of the skull became altered and thickened. (*Allgem. Zeitschr. für Psychiat.*, xvii, 2; and *Schmidt's Jahrbücher*, vol. 109.)

Injections of Bismuth in Gonorrhœa. The treatment of gonorrhœa by injections of nitrate of bismuth was advocated some years ago by Dr. Caby. Dr. Mourlon tried the plan in several instances; but found that it produced irritation of the urethral mucous membrane. On testing the mixture, he found that it presented an acid reaction. Finding this, he had the nitrate of bismuth carefully washed, to remove the acid; and after this, he used it with success in thirty-two cases out of thirty-seven. The ordinary duration of the treatment was twenty-one days. All the patients, except four, had gonorrhœa of from five to eight days standing, and presenting all the characters of the acute stage. In none of them did the inflammation extend deeply into the urethra, so prompt was the action of the injections in arresting its progress. (*Bull. de Thér.*; and *Revue de Thér. Méd.-Chir.*, April 1861.) The method of treatment here referred to was some time ago brought before the profession by Mr. De Méric, in a paper read before the Medical Society of London. (See British Medical Journal, May 5th, 1860.)

Elimination of Manganese when Employed Medicinally. With the view of determining by what means manganese is removed from the body when given as a medicine, Dr. William Turner examined the urine of two diabetic patients who had been taking permanganate of potash for three weeks. The result was the discovery in this fluid of a large quantity of the metal. In what form it exists in the urine, Dr. Turner has not been able to determine; but, probably, it is in the form of chloride, or of sulphate, or of both. His observations, he says, do not preclude the possibility of a partial elimination of the metal by the liver taking place; but the common statement that the latter organ is the principal channel of its removal seems to have rested more on supposed analogy than on experimental inquiry. (*Edin. Med. Jour.*, April 1861.)

Alum Lozenges. Instead of gargles, M. Argenti recommends alum lozenges in cases of angina of the pharynx and larynx, in loss of voice, and in aphthous ulcerations of the mouth, whether of scorbutic, scrofulous, mercurial, or typhoid origin. The lozenges are made of alum, gum arabic, and sugar, with some distilled water; they each weigh about six grains, and contain from a third to half a grain of alum. (*Revue Méd.-Chir.*, 1 Avril, 1861.)

British Medical Journal.

SATURDAY, MAY 11TH, 1861.

PEMPHIGUS.

Bamberger* considers it improbable that chronic non-syphilitic pemphigus is a simple independent disease. He believes that it is of humoral and dyscrasic character; and therefore, in a case which came under his observation, he directed his attention chiefly to the urine, the contents of the bullæ, and the blood. The patient, at the time when the examinations were made, was free from pyrexia, took solid food moderately, and drank pretty copiously. The results were as follows.

The urine, measured on ten days, amounted on the average to 472 cubic *centimètres* (about sixteen ounces), which is scarcely a third of the medium normal quantity. The specific gravity, on an average of seven observations, was 1.025, notably above the normal mean. The colour was yellow, or yellowish red; the reaction strongly acid. In all but two instances, the urine deposited a bulky yellow or reddish sediment, consisting of minute dark granules. A large quantity of ammonia was present, notwithstanding the acid reaction.

Quantities of Constituents of Urine in Twenty-four Hours.

	Grains.
Urea	295.3672
{ Chlorine	37.884
{ Or chloride of sodium	62.37
Sulphuric acid	2.002
Uric acid	3.564
Earthy phosphates	4.482
Alkaline phosphates	3.834

The general result of this analysis, compared with those of Lehmann, Gorup-Besanez, and others, made with healthy urine, is to show that there was an absolute deficiency in the amount of all the urinary constituents, especially in that of phosphoric and sulphuric acid. The presence of ammonia was the most striking circumstance. There was no sugar nor albumen.

In examining the fluid of the bullæ, care was taken to select the recent ones whose contents appeared serous. The fluid was clear yellow, slightly turbid, of a particularly unpleasant, but by no means urinous odour, and alkaline. On standing, it deposited a sediment consisting of pus-corpuscles closely crowded together, a few blood-corpuscles, and large epidermic cells. No fibrine-filaments, leucine, nor tyrosine, were found in this deposit. Ammonia, but no urea, was detected by Scherer in the fluid. The exudation contained notably less albumen than blood-serum, but about the same quantity of salts and extractives.

Blood drawn by venesection appeared quite normal, and decidedly contained ammonia. The solids of the serum were diminished from 89.5 to 67.164; the chief deficiency being in the amount of the albumen. The blood-globules were very little below the normal figure (126.94 : 130).

The practical hints which Bamberger derives from this inquiry are two—1, to give albuminous food in as soluble and easily assimilable a form as possible, so as to supply the deficiency of albumen in the blood; and 2, to administer acids, muriatic or acetic, to combine with the ammonia, which is then to be eliminated by the secretions. He advises, for this purpose, the selection of remedies acting upon the kidneys and intestines. In the way of local treatment, he recommends early opening the bullæ, and applying simple absorbent means, especially charcoal powder, in order to get rid as quickly as possible of the irritating ammonia.

The author recognises four forms of pemphigus—1, the chronic—the commonest; 2, the symptomatic; 3, the acute, formerly termed "febris bullosa"; 4, the syphilitic. In all, the prognosis, he says, is unfavourable.

As the amount of ammonia in the blood is not stated, it is impossible to form a decided opinion whether this ingredient was present in excess, or not. All our readers are well aware that, according to Dr. B. W. Richardson, ammonia is a normal constituent of the blood, and is the agent which keeps the fibrine in solution. It would seem to be in accordance with this view, that the blood in Bamberger's case was slow in coagulating. (He states that it was completely coagulated in about six hours.) From this we may perhaps assume that the ammoniacal solvent was actually in excess, the more so as the amount of fibrine was rather below the normal—viz. 2.49 : 3. Bamberger is inclined to think that the ammonia was generated in the blood, and passed thence into the secretion and exudation. He views it evidently in the light of a *materies morbi*, and, we suppose, would regard the pathological condition of pemphigus as an ammoniacal dyscrasia. How far Bamberger's views may prove correct, it is impossible at present to say; many more cases must be examined, before it can be admitted that an excess of ammonia in the blood plays a chief part in the pathogeny of pemphigus.

We may mention here that Professor Malmsten has detected, on microscopic examination, uric acid crystals in the fluid of pemphigus bullæ—a result which, if constant, would approximate the disease very much to gout. It has always appeared to us worthy of note, that, while there is a good deal of general similarity between pemphigus and eczema, both in the character of the eruption and in the way in which it is affected by arsenic, the former has so much greater a tendency to relapse than the latter. Under full doses of arsenic, we may see pemphigus get apparently well over and over again; but it is exceedingly prone to recur as soon as the medication is discontinued. This seems to accord with Bamberger's opinion, that the disease depends on a peculiar dyscrasia. Cazenave and Biett have often found the liver in a state of fatty degeneration in fatal cases; the result, possibly, of the exhaustion and debility induced by the disease. Perhaps, however, as pemphigus in its chronic form especially affects the debilitated and cachectic, it may be more correct to view the hepatic degeneration and the eruption as co-results of the same pathological state of the system. General experience is in favour of a strongly tonic and supporting plan of treatment in this disorder. Cazenave advises "une bonne nourriture, un vin généreux," with bark and acid.

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* Schmidt's *Jahrbücher*, vol. cviii, p. 319.

The investigations of Bamberger are of much interest, as touching the real and essentially practical point in all cutaneous affections, not to say many others; viz., Do these morbid phenomena depend on a *materies morbi* in the blood, which is to be eliminated or neutralised? or are they the result of defective assimilation, weakened innervation, and impaired vascular and capillary tone? Our empiric knowledge, it must be allowed, seems to speak much more in favour of this view than of the former. The blood seems to be bad, and the doctor has to try (if he can) to make it better.

LADY SANITARIANS.

The anniversary of the Ladies' Sanitary Association has served our contemporaries for a text on the necessity of sanitary reform; and we think the opportunity too good a one for a practical remark or two to let it slip. At first sight, it might be thought that a sanitary organisation worked by women might be of the dilettante sort; and this is to some extent quite right. With the large majority of women, the hope even of effecting sanitary good can be only a sentiment. Our countrywomen in every station of life are themselves too ill instructed in the laws of life to be able to do much towards instructing others. At the same time, the very existence of an organisation of this sort calls forth an amount of exertion which cannot but produce favourable results. The work of self-examination which taking part in such an association as this involves must necessarily lead to self-improvement, and ultimately to the conclusion that nothing short of teaching in school the laws of life will prevent the ignorant from breaking these laws and suffering disease as the consequence.

In this way the Ladies' Association is doing much good, and really paving the way for a much greater change in the domestic habits of the people of this country than any that has yet been contemplated. We will recount what they have done, for the benefit of those who are anxious to know where to begin in this great work of sanitary reform.

In the first place, they have published a number of good tracts. Some have been written expressly for them, and others have been adopted into their list from other sources. These tracts have all been approved by medical men eminent for their sanitary knowledge, and therefore may be trusted by our friends in the country. They have already printed ten or twelve of these tracts, and have circulated about 150,000. We cordially recommend their perusal to rich and poor. They are written in a pleasing style, and cannot fail to awaken attention to the important questions they discuss.

In the second place, the Ladies' Association has organised in London a series of lectures by the medical officers of health in many of the poorer localities; and great numbers of people have thus had their attention drawn to the fact that their bodies are subjected to laws as well as their souls. The lady patronesses have themselves submitted to instruction in a course of lectures delivered by Mr. Roberts, Mr. Hart, Dr. Farre, and Dr. Lankester, at the South Kensington Museum; whilst a course of lectures on physiology by Mr. Marshall, expressly adapted to the class of which the association is composed, has been inaugurated at University College.

In the next place, branch associations have been formed in the country, which have carried out sanitary work in their own way. In one place, we are informed, the ladies sent round a band of men with brushes and whitewash, to cleanse the rooms of those who wished it; whilst in another place skipping-ropes were supplied in a public ground, as an inducement to bring out children from their grimy homes.

If kind-hearted and intelligent women will only meet together in our large towns, and see what they can do in this direction for their poor neighbours, we are convinced that they will receive as much benefit themselves as they confer on others. Whilst contemplating the unventilated rooms in which their poorer neighbours are huddled together at night, they will find that their own nurseries have been neglected in this respect to a lamentable extent. Whilst pointing out to those who are less opulent than themselves the worth of fresh air and the blessing of pure water, they will be led to inquire as to whether they have taken all the advantages they might from these gifts of a kind Providence. There are few things from which both rich and poor suffer more than from bad nursing. From this time forth, the women of England will have a prophet and teacher amongst them. All who would perform rightly the functions of this high ministry must read the pages of Florence Nightingale. There they will find how much they have to learn, as well as to unlearn, before they themselves can become intelligent ministering angels, or teach their poorer neighbours the true way to nurse the sick.

We recommend, then, the Ladies' Sanitary Association to the attention of our medical brethren and their wives. The terrible evils of our social life, with which medical men are best acquainted, must be alleviated, now that we know their causes. To us, in the natural course of our studies and pursuits, it has been given to become acquainted with the great laws of our existence. In our profession the great problem has been worked out of the causes of unnecessary disease and death; and it is at our peril that we conceal these causes from the great mass of the people. Let us determine that, whatever may have been the pride and selfishness of those in past times, the reproach shall not lie with us that the "people perish and no man considers it".

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THE WEEK.

Every day's experience proves more and more the propriety and necessity for our rigidly practising the ethical rule of abstaining absolutely from all kind of professional intercourse with homœoquacks. We cannot too often repeat the truth, that this species of quackery is fostered and kept alive, to a great extent, by the proceedings of those members of our profession who break the aforesaid rule of right. The reason is obvious. By meeting the quack in consultation, you recognise his professional position *coram publico*, and you cast a slur upon the practice of your profession. The argument that is used to cover the proceeding is clearly nothing but a cloak to cover its indecency. It is said the patient only wants to be left alone, and be properly nourished, and then he will do as well (aye! there are members of our profession who do not hesitate to say better) in the hands of the globule-giver than in the hands of a practitioner of medicine who gives physic. When members of our profession of high standing appear on the stage as consultants with these quacks (and it is a curious fact that whenever members of our profession do so appear, they are usually men of high (?) standing) are we to be surprised that homœoquacks are bold enough to offer their services to our public charities? Are we to be surprised that governors of hospitals are found to back their claims, when they see those claims acknowledged by high (?) members of our profession who meet them in consultation? Here now is one of the followers of this Hahnemannic practice, who presents himself to the governors of Addenbrooke's Hospital, Cambridge, as an opponent of Dr. Haviland. We need hardly say that he has not a chance of success; but still he comes forward as a candidate. A governor of that hospital has naturally written us a very indignant letter in reference to the matter; and he asks "Is there no means of preventing this kind of attack on the noble science of medicine." Well, we answer, let us purge ourselves utterly of the sin which lies at our door of allowing members of our profession to associate professionally with the followers of Hahnemann. Until we have done this, we have no right to exclaim against a "credulous public"; and we waste our breath in casting stones at the globulistic quackery.

The *Dublin Medical Press* this week gives an account of what it calls the "rude and unseemly attack on Dr. McCormac of Belfast by the Medico-Chirurgical Society of London—a display of arrogant and unmannerly intolerance of instruction from sources not relished by learned Londoners."

> "We cannot," says the journal, "after mature consideration, divine the cause of this onslaught, but we are inclined to attribute to it in part to the no Irish-need-apply motive, partly to that happy state of fat contented ignorance in which John Bull delights to repose. Perhaps there may be at bottom some uneasy misgivings as to unpleasant poaching on pulmonary preserves, perhaps some indignant feeling of wounded pride of authorship, which so often provokes unsavoury criticism."

We will only observe on this strong language, that we much regret to find the editor of a respectable medical journal lend himself so unreasonably, and injudiciously, and unwisely, to the fostering of national prejudices. We are sure that he will, on reflection, regret to read the absurdities which he has so hot-headedly committed to print. Perhaps, if he had read the paper in question, he would have come to a very different conclusion.

The Emperor of the French has received a deputation from the Royal Society for Prevention of Cruelty to Animals. An account of the visit will be found at page 512. We sincerely trust that this interview may be the means of putting an end to the unjustifiable brutalities too often inflicted on the lower animals, under the guise of scientific experiment. It has never appeared clear to us that we are justified in destroying animals for mere experimental research, under any circumstances; but, now that we possess the means of removing sensation during experiments, the man who puts an animal to torture ought, in our opinion, to be prosecuted under Mr. Martin's act. Some idea of the atrocities committed in French veterinary schools may be gathered from what is given in the report of the interview above referred to. We have no doubt whatever that the facts there stated are strictly accurate. In a paper published some little time since in Dr. Brown-Séquard's *Physiological Journal*, a writer, in giving an account of some of the structures, refers (and quite incidentally) to the condition of the body of a cow, etc., which had died from sheer agony, after some twenty-four or forty-eight hours torture, being sliced to death by practising operators. We are not disposed, in a question of this kind, in which some of the highest considerations are concerned, to allow our opinion to be swayed by the opinions or the proceedings of even the greatest surgeons and greatest physiologists. That such authorities performed vivisections is a fact; but it does not satisfy us that the proceeding is justifiable. Under any circumstances, this much, we think, is evident enough: namely, that, if vivisections be permissible, they can only be so under certain limited and defined conditions. We need hardly add that these conditions have not yet been laid down. Altogether, the subject is one well worthy of serious discussion: and gladly would we see the interests of medical science in the matter properly reconciled with the dictates of the moral sense.

Dr. Livingstone, in a letter, lately read to the Geographical Society by Sir R. Murchison, writes as follows, of a remedy for fever suffered by Europeans in Africa:—

> "But I must tell you that we were saddened by the loss of a party of London missionaries, as we suppose, by fever, at Linyanti; six out of nine Europeans perished in three months. By a remedy first tried on my own children at Lake Ngami in 1850, we, at a lower and more unhealthy part of the Zambesi, cured severe cases of the complaint in Europeans so quickly, that our march was rarely interrupted more than a day or two; a man stricken prostrate was sometimes able to resume his march on foot a day after the operation of the remedy, and this while those good people were helplessly perishing. The proper medicines, too, for its composition were found by me in the waggon, which has been carefully guarded for seven years, within a few hundred yards of their graves. I think it is mentioned near the end of the *Missionary Travels*, which you made me write; but I am now anxious that it become generally known, and there is great difficulty in the matter. Medicines so often deceive people: panaceas in one hand, and nonentities in another. I have, however, never failed to cure during ten years."

The following is a satisfactory explanation of the fact, that small-pox flourishes so extensively in Ireland:—

> "The Poor-Law Commissioners state in their report for the past year, that 'the number of children among the annual births in Ireland, who ought to be presented for gratuitous vaccination, is about 145,000; but that, of the persons vaccinated, less than a fourth are under one year old, the remainder being frequently between one and ten years of age, not uncommonly between ten and twenty, and some even older than this. It follows, that of the 100,000 persons vaccinated last year, not 30,000 belonged to the 145,000 births among the poor for the year; and that above 100,000 of those children had not received protection from small-pox, by vaccination, on September 30th. It cannot be doubted that this state of things, annually recurring, must be attended with much preventable death by small-pox, much preventable deterioration of constitution, much preventable injury or destruction of sight caused by small-pox, and much consequent permanent pauperism. We will again repeat our persuasion, that the best remedy for these evils would be found in the extension to Ireland of the English system of compulsory vaccination, in conjunction with a registration of births and deaths.'"

One would, naturally, have expected to hear (as, in fact, we have already heard) glowing tidings of the benefits of the Turkish bath from the district around Cork. We must, however, confess, that we never expected such wonderful things as are authoritatively disclosed in the following answer of the Superintendent of the Cork Lunatic Asylum to the Board of Governors:—

> "Dr. Power, in answer to a question, stated that the success of the Turkish bath in the house was even greater than he expected, and he was almost afraid to state his opinions of the success that would attend the use of it, for fear, in the event of any subsequent failure, his opinion might be quoted against the bath as having been founded on a very short trial. Out of four patients, however, regularly exercised on by it, one had been dismissed cured, and the other three were working regularly." (*Cork Examiner.*)

If this Turkish bath goes on spreading throughout the country, it is quite clear that the practice of physic will soon come to an end!

It will be a long time, apparently, before the Medical Act enables us to learn what is and what is not the meaning of many of its clauses Doctors, and judges, and juries, hold very opposite opinions upon the interpretation of this, as of so many other Acts of Parliament. For example, the 32nd section of the Medical Act of 1858, enacts that

> "No person shall be entitled to recover any charge in any court of law for any medical or surgical advice or attendance, or for the performance of any operation, or for any medicine which he shall have both prescribed and supplied, unless he shall prove upon the trial that he is registered under this Act."

Yet, with a truly British love of quackery, a jury decide that the plaintiff in the following case was not holding himself out as a medical practitioner, or acting as a physician, apothecary, or surgeon, and, therefore, adjudge the plaintiff the amount he claimed—leave, however, being reserved to the defendant to move the court in reference to the question under the Medical Act. The tale is an amusing one; but it is defective in not telling us the nature of the diseases for which the electric fluid was employed.

The plaintiff, who described himself as a mechanical operative galvanist, residing at Quebec Street, sued the defendant, a member of the firm of Wilkinson and Frewer, saddlers, in Oxford Street, for money payable by the defendant to the plaintiff for galvanic operations performed by the plaintiff upon defendant and another person at his request, and for materials and electric fluid used in the said operation. The plaintiff, who was the author of a pamphlet entitled *Modern Remedies* versus *Professional Prejudices; with some remarks on his newly-discovered process of frictional absorption*, had been recommended to the defendant in the year 1858, and had attended him for eighteen weeks, applying galvanic wires in a bath. The plaintiff had also attended the defendant's wife, and the defendant also requested the plaintiff to attend a Miss Clegg, stating, according to the plaintiff, that he would be responsible. The plaintiff attended Miss Clegg for thirty weeks up to May 1859. The charges were at the rate of one guinea a week. The defendant had paid £5 in cash and given a bill for £20 on account. The defence was that the plaintiff attended Miss Clegg under the understanding that her father was to be responsible; further, that if there was no cure there was to be no pay; and, also, that the plaintiff could not recover in consequence of the terms of the aforesaid Act.

DR. ANDRIEUX has just published a paper on the question, What are we to think of the influence of climate on the development, the progress, and the cure of phthisis? From a review of the tables of mortality obtained from all parts of the world, he is brought to the opinion that the proportion of phthisical patients living in the quarters to which persons suffering from lung-affections are usually sent, is much the same as the number in the districts whence the patients came. He, however, candidly admits that his statistics are not of the most infallible kind.—The prize of 1,500 *livres*, founded at the Academy of Turin by Dr. Strada, has been given to Dr. Maschi for his treatise on Animal Chemistry. The Ravizza prize for the book best adapted to the popular understanding has been adjudged to Dr. Mantegazza, Professor of Physiology at Padua; its title is, "*Il bene ed il male, libro per tutti*", "Good and Evil, Every Man's Book."—Sixteen out of sixty-five students of medicine, entered during the year at Oporto, have received prizes!—The salary of the surgeons of the Lisbon Hospital, which, according to ancient custom, was less than that of the physicians, has been recently raised to the same figure. "In most of the English hospitals, according to the BRITISH MEDICAL JOURNAL," says *L'Union Médicale*, "the physicians and surgeons receive no pay. This is very remarkable, considering the character of the English, and is honourable both to the scientific zeal and professional disinterestedness of our professional brethren."—The Spanish Congress lately voted pensions to the widows of five medical men who died of cholera, with which they were seized in the practice of their profession. —Dr. Pappalexopoulo has been appointed Minister of the Interior in Greece!—On the 18th of April, the students of the University of Vienna determined to give a proof of their respect to Dr. F. Schuselka; but he entreated them not to do so, in order to prevent any disturbance in the streets—thanking them at the same time from his heart for their sympathy. —The varied talents of M. Piorry are well known. He is not only master of the Hippocratic art; but he is also exercised in the arts of Tyrtæus, Lucretius, Beranger, Rossini, and Raphael. Lately he has shown his powers in the art of Perrault, having produced a plan for the reconstruction of the hospital La Charité.—Dr. Zeissl has received his appointment of Professor of Medicine—the first Jew who has ever enjoyed such a distinction in the medical faculty of Vienna.—A company has been formed at Zurich for the purpose of building houses for the working classes; at the head of the undertaking is Dr. Von Muralt.—The Rhenish doctors are exclaiming against the incursions of illegitimate and legitimate practisers of the healing art into their provinces. An aurist from Berlin, invited by high personages, is doing a great stroke of business, "although he never passed any examination, and is perfectly ignorant of medicine." Then, again, a bricklayer in a village of the Upper Rhine has a larger practice than the Professors of the Faculty of Bonn. He examines the urine, and has put all his licensed brethren in the shade.—"The term gout is an admirable one," says M. Trousseau, "because it signifies nothing; and just so is the word syphilis—the name given by Fracastor to a shepherd of whom he tells in his poem on the venereal disease. Words which have no meaning in them are of great use, for they do not in any way mislead us as to the cause or nature of the diseases they indicate. On the contrary, the nomenclature of doctrinal denominations has the great disadvantage of giving an imperfect idea of disease, and consequently becomes misplaced as science progresses. The terms syphilis and gout serve for all times and all countries; and in this way gout is preferable to cheiragra, podagra, ischiagra, or arthritis; for may not gout seize upon the brain, etc.?"—*L'Union Médicale* informs us "that the reorganisation of the medical service of the English army has been accompanied with a fact unique in military medicine—viz., the establishment in general hospitals of female nurses, under the control of women, and receiving authority solely from the Minister of War, through the Directress or General *Superintendante*, residing in London!"—Statistics show that, in the department of Haut Rhin, there is a doctor to every 4,499 inhabitants, an *officier de santé* to every 23,783, a *pharmacien* to every 7,804, and a *sage femme* to every 1,274 inhabitants.—"Tradition and daily experience", says M. Trousseau, "teach us that we cannot, and that we ought not to attempt to, cure the gout radically."—A female in Stettin forged the name of a physician, and thereby obtained from a druggist eight ounces of bitter almonds, with which she poisoned herself. The druggist and his shopman were in consequence brought under judicial consideration, and underwent three separate trials. At the first, both the druggist and his man were found guilty; at the second, the man only; and at the third, both master and man were discharged scot-free! — M. Labbé relates a case, occurring in the Hôpital Lariboisière, in which scarlatina, typhoid fever, and measles were present at the same time. A young man, suffering during eight days from the symptoms of typhoid fever, was seized in the course of the disease with lacrymation and cough, and a rubeoloid eruption appeared on his abdomen. Before the eruption had disappeared, sore-throat came on, and was followed by well-marked scarlatina eruption in different parts of the body. A patient convalescent from scarlatina had, it appears, occupied the neighbouring bed. The patient died on the seventeenth day, and Peyer's patches were found ulcerated.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETING TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East York and North Lincoln. [Annual.]	Hull Infirmary.	Wednesday, May 22, 1.30 p.m.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-fifth Annual Meeting of this Branch will be held at Liverpool, on Wednesday, June 5, under the presidency of Edward Batty, Esq.

Gentlemen who intend to read papers, are requested to send notice to the Honorary Secretary as early as possible.

A. T. H. Waters, M.R.C.P., *Hon. Sec.*

Liverpool, May 1st, 1861.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

The ordinary meeting of this Branch was held at the York House, Bath, on April 25th; John Soden, Esq., President, in the chair. There were also present thirty-three members and one visitor.

New Members. Henry Alford, Esq., Consulting Surgeon to the Taunton and Somerset Hospital, and Chas. Bleeck, Esq., of Warminster, were elected members of the Branch.

Papers and Communications. The following papers were read:—

1. Memoir of the late George Norman, Esq. By W. Davies, M.D.

2 and 3. On Diphtheria. By W. Budd, M.D., and J. G. Davey, M.D.

[These papers will be sent for publication.]

4. Mr. Godfrey gave some interesting particulars of cases of injury to the head, which had lately occurred in his hospital practice.

Special Correspondence.

BIRMINGHAM.

[from our own correspondent.]

At the last ordinary meeting of the Branch, the first paper was "Notes on Modern Ophthalmic Surgery," by Mr. J. Vose Solomon. This embraced so many topics of importance, that it is impossible to do more than glance at a few of them. Respecting the value of *Iridectomy* and *Intraocular Myotomy* in the treatment of acute glaucoma (in the author's opinion, a much rarer disease than it is sometimes represented), he offered no opinion; experience having taught him that the disease can be cured by either operation. The difficulties of iridectomy are not sufficient to deter any moderately experienced operator from attempting it; but quite enough to prevent any one from succeeding, who is not accustomed to operate on the internal ocular structures. Iridectomy sometimes necessitated the use of a diaphragm subsequently to correct irregular refraction, as in a case within the author's knowledge. From this objection, intraocular myotomy is free; neither does it interfere with the facial expression. Mr. Solomon has never been satisfied with the belief that, in sympathetic irritation of a sound eye by a diseased one, the commissural fibres of the optic nerves are the channel of transmission; he holds that the connection is by means of the ophthalmic branch of the fifth. In one of his cases, the patient, after removal of one globe, had irritation again set up in the sound eye by the application of a glass mask to the stump. This occurred several times, and was each time relieved by removal of the mask. Lippitude, a disease usually submitted to palliative treatment only, Mr. Solomon has attacked radically by the following method, for more than a year past. A longitudinal groove is cut in the palpébral conjunctiva, and another at right angles to the former in the mesial line. It is important that this latter incision should be carried *through* the mucous membrane. The operation fails without careful after treatment. All tension should be removed from the integument by strips of plaister, and the granulation, if exuberant enough to fill up the grooves, must be excised. This treatment is less painful and more effectual than that by escharotics usually adopted.

Dr. Russell read a paper on the *Treatment of Pneumonia*, the discussion of which took place at an adjourned meeting. The point of most importance was the stimulant question. The conclusions arrived at, both in the paper and at the discussion, were similar to those reported in my February letter, as having been elicited by a former paper by the same author.

Dr. Wade exhibited an *Aneurism*, in which he had succeeded in diagnosing during life the existence of a communication between the sac and the pulmonary artery, by means of the physical signs.

The Midland Medical Society's meetings have also been well attended, and of some importance.

At the last but one, Mr. Clay, Professor of Midwifery at the Queen's College, related the particulars of a case in which he had recently performed *Ovariotomy*. Mrs. B., aged 48, of lymphatic temperament, mother of three children, was found, five months ago, to have an ovarian cyst, which had probably existed for twelve or eighteen months. She had had peritonitic symptoms twice previous to the discovery of the tumour. Shortly after this epoch a vein burst in the left leg, which was numbed, but not œdematous. In the middle of January this year, she suffered much from prolapse of the bladder, which was relieved by suitable treatment. The urine was invariably found free from albumen. Sickness was afterwards added to the previous symptoms. One or two more attacks of peritonitis having happened, and the patient exhibiting a downward tendency, Professor Clay determined to extirpate the diseased organ, which he did on the 4th of March, in the presence of Drs. Blunt and Heslop, Messrs. Gamgee, George Jones, and Furneaux Jordan. The patient and her friends had been previously fully apprised of the risks of the operation, and it was undertaken with their cordial approval. The room was heated to 70° Fahr., and chloroform given. An incision was made, commencing an inch below the umbilicus, and carried to within an inch and a half of the pubes, in all about five inches. The parietal fat was an inch and a half thick. The linea alba was exposed and divided on a director; and the peritoneum was opened in the same way. A cyst, which appeared to be a very large one, then came into view; but it was so extensively adherent that Mr. Gamgee thought the adhesions insuperable, and advised that the operation should be abandoned. Mr. Clay found a spot just above the pubes, where no adhesions appeared to exist. He, therefore, determined to pass his hand in this direction to the pedicle, and so break down the adhesions from behind forward. In attempting this, the hand came into contact with a second cyst, apparently isolated, and of about the size of a cocoa-nut, which was also adherent by its anterior surface, and appeared to bar effectually any further progress. He, therefore, ruptured it between his thumb and finger, which produced a gush of dark-coloured, thin, serous fluid. This cyst communicated with the former one, and the contents of both were completely discharged, the quantity being estimated at about eighteen pints. About four pints of similar fluid were removed from a third cyst by Mr. Spencer Wells' large trocar. The tumour proved to be of the left ovary. The adhesions were then readily broken through, including one arising from the omentum. Mr. Spencer Wells' clamp was then applied; and before excising the mass, the pedicle, a very short one, was pierced with a double ligature and tied in two portions. A double ligature was then made to encircle the whole, and the tumour was removed. The pedicle was fastened to the edges of the wound by a hare-lip pin. The wound was closed by similar pins passing through the peritoneum, and by silver-wire sutures in the intervals between the pins. The right ovary was healthy. The operation lasted about thirty-five minutes. Three small vessels were tied; but not more than an ounce of blood was lost. A linseed-meal poultice was applied, and a little thin gruel administered; and in about half an hour reaction was complete. The patient seemed to be going on comfortably; but the pulse continued to rise in frequency, and she expired thirty-four hours after the operation, as it was believed, from internal hæmorrhage. No *post mortem* examination could be procured.

Mr. Clay pointed out that the adhesions of the tumour were so considerable as to induce an experienced surgeon to advise the abandonment of the operation, yet they ultimately proved but little obstacle to its completion; perhaps, in similar cases, perseverance would have enabled the operator to conclude, instead of relinquishing the operation. In many cases, the adhesions required great force to separate them; but Mr. Clay would "not be disposed to abandon a case of this kind, if it were possible to overcome the adhesions by any means whatever." The shortness of the pedicle was an unfavourable feature, as necessitating much traction on the uterine organs, and thereby increasing the risk of peritonitis. In a similar case Mr. Clay would, in future, tie the vessels of the pedicle, apply the actual cautery to the stump, and return all into the abdominal cavity. He observed upon the exactness of the diagnosis in this case, as far as the nature of the disease was concerned, and believed that, where mistakes had been made upon this point, they were due to ignorance or carelessness, and not to the imperfection of medical science. He was of opinion that the patient's death resulted from intraperitoneal hæmorrhage, having its source in the vessels of the adhesions, and not from shock or peritonitis; since she had recovered from the shock, and the time for peritonitis had not arrived.

The history of ovariotomy in this town is of use, as showing how the establishment of new operations may be delayed by accidental circumstances in no way affecting their merits. Some ten years ago, an able and enterprising surgeon performed ovarian section at one of our public institutions. The case, like many others, was not successful, although the operation was as well performed as the science of that time permitted. Nevertheless, the result of this case has been that, for ten years, Birmingham has contributed nothing to the statistics of a proceeding, by the adoption of which, a distinguished accoucheur stated the other day that he had done more for humanity in three months that in the whole of his previous practice; as regards, at least, this fatal and too frequent disease. It is true that it has been done here once since; but no account of the case was presented to us for discussion, and, indeed, none published, till a short epitome appeared the other day in Professor Clay's *Appendix on Ovariotomy*. Under these circumstances, much credit is due to Professor Clay for undertaking its performance; and, perhaps, still more for at once bringing before us the particulars of an unsuccessful case. He has done good service by securing an expression of opinion favourable to the operation, whilst his surgical dexterity was unanimously applauded during the discussion which followed at this and a succeeding meeting.

Dr. Nelson, Messrs. Bolton, Gamgee, Furneaux Jordan, Pemberton, Yates, and others, took part in the debate, and each speaker expressed a decided opinion that, in suitable cases, ovariotomy should be performed, an opinion which, when opportunity offered, they were individually prepared to act upon.

Dr. Russell read an able paper on the possibility of establishing a precise diagnosis in a large proportion of cases of *Obstruction arising from Stricture of the Sigmoid Flexure*, or of the rectum beyond the reach of the finger. He strongly advocated the earlier performance of Amussat's operation, believing that the disadvantages and unpleasantness of an artificial anus in the loin had been much overrated.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, May 1st, 1861.

W. Tyler Smith, M.D., President, in the Chair.

Extract of Beef. Dr. Druitt exhibited specimens of a liquid and solid extract of beef, made under his directions by Brand, of Little Stanhope Street, Mayfair. He observed that, next to brandy, no remedy was so essential in the treatment of debility from flooding as the true essence of meat; and, besides, he claimed the credit of introducing this as a remedy for intense nervous exhaustion, arising from any cause whatever, whether from grief or mental disturbance; and believed that it possessed stimulating effects on the brain. The liquid essence is the pure juice of beef, prepared by heat, of a clear amber colour and aromatic smell. It contains scarcely any gelatinous matter. The solid extract is made by drying at a gentle heat, and may be kept a long time without spoiling.

New Pelvimeter. Dr. Meadows exhibited a pelvimeter, the invention of Mr. Earle, which promised to be useful in practice. He also directed the attention of the Fellows to the heart of a child, two years old, who had died from idiopathic pericarditis.

ON THE TREATMENT OF CASES OF ABORTION IN WHICH THE MEMBRANES AND PLACENTA ARE RETAINED.

BY W. O. PRIESTLEY, M.D.

When abortion occurs in the early weeks, the ovum is frequently expelled without rupture of any of the membranes except the external decidua, because the attachments to the uterine cavity are unstable; the mass is then smaller and less difficult to push through the os uteri, and the contractile power of the uterus is very feeble. In the third, fourth, and fifth months, the decidual cavity is obliterated, the placenta has acquired more intimate attachments to the womb, and the contractile power of the uterus being greater, rupture of the membranes commonly takes place before expulsion. The embryo having escaped, the secundines may speedily follow, or, lying in the os uteri, they may be removed by the finger or some simple instrument. In a considerable number of abortions, however, in which the fœtus and liquor amnii have been voided, the secundines are not soon extruded; and, after the uterus has made repeated ineffectual attempts to expel them, the os uteri closes and action ceases. Instances of this kind are common in obstetric practice, and are often a source of much embarrassment to the practitioner. Obstetric authorities differ widely as to the treatment which ought to be adopted when the secundines are not thrown off spontaneously, and particularly as to the propriety of manual interference. Dr. Denman, Dr. Davis, Dr. Ramsbotham, and Dr. Dewees deprecate any attempts at extraction by the hand; and Mr. Ingleby held that "no manual extraction can be effected prior to the sixth month". Dr. Burns and Dr. Churchill regard interference in this way as only allowable in exceptional cases: and Dr. Tyler Smith stands almost alone in recommending the removal of the secundines in all cases of abortion where they are retained. The author regarded the question of treatment as an important one to all obstetric practitioners, as they might be blamed on the one hand for omitting a duty they ought to have performed, or on the other hand might be charged with meddlesome practice. He had met with a considerable number of patients who had seriously suffered from placental retention; and this had induced him to bring the subject before the Society, for the purpose of eliciting opinions as to the course proper to be followed. The dangers and morbid conditions arising from membranous and placental retention were stated to be—

1. Flooding; this being sometimes of a very serious character, and the patient being always liable to hæmorrhage so long as a fragment remains.
2. Decomposition of the uterine contents, leading to local inflammation of the uterus and surrounding tissues, to phlebitis and phlegmasia dolens, and lastly to general poisoning of the system, as evidenced by irritative fever, peritonitis, rheumatic pains, the formation of abscesses, and even the occurrence of death.
3. Sub-involution of the uterus.
4. The generation of some of the forms of mole out of the tissue left in the uterine cavity, and the hæmorrhage attending the presence and expulsion of these morbid growths.

The entire absorption of the placenta was regarded as uncertain, and not to be counted upon. Cases illustrative of the several sources of danger were detailed.

The author's experience led him to believe that the effect of the administration of ergot was very uncertain, and that galvanism and injection of water were not to be depended upon. Any form of abortion-forceps which must be pushed beyond the reach of the finger he regarded as useless and dangerous. He was thus driven to the conclusion that the introduction of one or two fingers into the uterus was the safest and best way to remove the retained uterine contents. In his hands, such manual interference had never been followed by any evil results; and a considerable number of cases had fallen under his observation. He begged particularly to be understood as not advocating rash and violent attempts to empty the uterus. Rough and careless manipulation might be fatal to a patient; but the consequences of placental retention were so serious that, under ordinary circumstances, less risk was incurred by the operation. It was important to effect removal, not only before putrescence began, but before the os uteri became much contracted; and if in six hours after the escape of the embryo the placenta did not follow, it might be removed. The extraction might be effected sooner than this if much hæmorrhage were present. He had found it convenient in operations to place the patient on the back, with the thighs flexed on the abdomen; and while one hand steadied and depressed the uterus externally, the other was with all possible gentleness passed into the vagina. The os uteri was then dilated with the index-finger, and the second finger followed if required. These two fingers formed the best and most sensitive forceps; and, although time and care might be necessary to their introduction, their employment was most satisfactory. The administration of chloroform previous to the manipulation afforded great assistance by relaxing the passages and saving the patient from pain. The author had succeeded in removing the placenta with the hand, in some cases, days and weeks after the escape of the fœtus; but he had never ventured on any such attempt if inflammatory symptoms and irritative fever had already set in. Where the os uteri was too contracted to permit the introduction of the finger for the removal of a placental mass, its dilatation could be effected by sponge-tents, which had the double advantage of staying hæmorrhage and facilitating the passage of the finger.

Mr. Robins stated a case in which there was much flooding, owing to retained placenta, after abortion at the third month. Mr. Robins only got away a part of the placenta, the rest being left behind. This was two months ago, and the portion has not yet passed; yet there is no flooding nor symptom of putrefaction.

Dr. Hall Davis observed that but little could be added to make Dr. Priestley's paper more complete than it was. In the early part of his practice, he (Dr. Davis) was in the habit, in cases of retained placenta, of trusting partly to nature, and, this failing, to injections of warm water into the uterus to wash away putrescent matter. Subsequently he became convinced that it is better to remove the placenta manually, and so effectually prevent either flooding or blood-poisoning. He had also seen cases where the part of the placenta left *in utero* had become changed into a mole, and so produced great distress, with numerous attacks of hæmorrhage. He thought that putrid absorption from retained placenta occurred most frequently where there was hæmorrhage. As to absorption of the placenta, he had never met with a case of it in his own practice, and he thought that the possibility of its happening ought to have no effect upon our treatment of these cases. In proof of the correctness of Dr. Priestley's views, Dr. Hall Davis narrated the particulars of two cases about which he had been consulted, and in which death resulted from blood-poisoning due to retention of the placenta.

Mr. Peter Marshall said that at one time he was a sceptic as to the absorption of the ovum, but that he had recently seen a case which convinced him that this did sometimes happen. The ovum in this instance was felt by two or three experienced practitioners protruding at the os uteri; yet it did not come away, and the patient recovered favourably. Mr. Marshall said he had also noticed that the rigors which occurred in cases of putrid absortion from retained placenta were often of a periodic character. He congratulated the author upon his valuable paper.

Dr. Tyler Smith said that, in rare cases, the placenta was no doubt absorbed after abortion. The chance of such an occurrence ought not to be allowed, as it led to hæmorrhage and infection of the system by putrid matter. The number of instruments devised to extract the placenta showed how important the matter was in practice; but nothing yet produced was equal to the hand and finger. He had always taught that, in abortions occurring even before the formation of the placenta, the thickened decidua should be removed, if it remained and caused excessive draining, after the passage of the embryo. In the early months, the uterus was only partially developed, so that its expulsive action was comparatively feeble; and the difficulty was often increased by adhesion of the decidua and after-birth from disease. In later abortions, he always removed the placenta as soon as its retention produced mischief. It was seldom necessary to pass more than one finger to detach and hook down the retained mass. In some cases, the whole hand required to be passed into the vagina; in others, the uterus was sufficiently low to admit of the passing of the finger without this. Chloroform was often of great value in promoting dilatation of the ostium vaginæ and os uteri, particularly in cases where the retention had lasted several weeks or even months. He had not seen any mishief follow the removal, but the contrary. The conditions were, that the hand should be clean, and the proceeding without violence. In cases of flooding after delivery at the full term, when the placenta had been expelled, he had frequently passed the hand into the uterus to remove portions of the membrane which were apt to separate from the placenta and remain in the uterus, or hang from the os. Many of the worst cases of flooding met with in practice were, he believed, of this kind; and clearing out the uterus was the only effectual way of stopping the loss of blood.

Dr. Graily Hewitt believed that the case had been considerably overstated, and that bad effects had been set down as following the retention of the placenta in these cases of abortion, which were really by no means so commonly observed in practice as would be supposed. The author himself had been constrained to admit that there are few recorded cases of serious results. The cases brought before the Society by the author as instances of bad results following retention of the placenta after abortion were some of them open to the serious objection that they did not prove what they were intended to prove. Thus a case was cited in which a patient, who had aborted five years before, and in whose case the placenta had not been removed for some few days afterwards, the uterus was found large, retroflexed, and admitting the sound to the extent of six inches. This case was cited as showing one of the evil effects of retention of the placenta. Where was the evidence that this condition of the uterus was produced by the retention of the placenta for a few days five years before? Other cases related were open, though not so markedly as in this instance, to objections of an analogous kind. He had no objection to the procedure recommended in certain properly selected cases; but he should consider it a most unfortunate thing if this Society gave sanction to the practice of dilating the os uteri, and effecting the removal of the placenta with more or less force in all cases where there was delay of a few hours in its expulsion. He was convinced that the effect of the expression of such an opinion would be most disastrous, and that much injury might be consequently inflicted. It was not easy to convey by pen and ink, and to all persons alike, an adequate idea of the degree of force which might be safely used. How the exercise of force in effecting dilatation of the os uteri in cases of abortion might prove injurious was shown by the case published in the *Lancet* of last year, where the individual (uneducated, it is true) ruptured the uterus and vagina in the attempt to remove the placenta in a case of abortion at the fifth month.

Dr. Tanner remarked that the discussion which had just taken place, proved that the author had not acted unwisely in bringing the matter forward. His own views were quite in accordance with those of Dr. Priestley; and, indeed, he had taken much pains to enforce these same opinions in his recent work on the *Diseases of Pregnancy*. He believed that although after abortion a portion of the placenta or membranes *might* be left in the uterus and no ill consequences ensue, yet such a fortunate result was exceptional and could not be depended upon. There were two great sources of danger in these cases,—namely, flooding and blood poisoning. If the portion of placenta remained adherent to the uterine walls, it acted like a polypus and produced flooding, which could only be permanently checked by removal of the foreign body. If the substance became detached and was not expelled, it putrefied; and then there was the fear of purulent absorption, uterine phlebitis, and so on. Dr. Tanner then referred to the report of a case by Mr. Humphreys of Shrewsbury, in the British Medical Journal for December 1858, in which the retention of a piece of placenta only the size of a shilling had caused fatal flooding; while he also mentioned a somewhat similar instance about which he had been lately consulted, but where recovery occurred after the expulsion of a mass of after-birth the size of a walnut. He alluded, in conclusion, to the observations of Mr. Marshall as to the absorption of the entire ovum, and stated that he had never yet witnessed anything which would lead him to believe in the possibility of such an occurrence. He thought that it was sometimes very difficult, when a mass was felt at the os uteri, to say whether it was an ovum or a clot of blood; but even allowing the substance in Mr. Marshall's case to have been an ovum, it might have subsequently passed away without the patient's knowledge.

Dr. Priestley, in reply, said that the observations of Mr. Marshall, on the periodic character of the rigors in cases of putrid absorption from retained placenta, were interesting, inasmuch as they showed that some analogy existed to instances of blood-poisoning from other causes. Dr. Davis's remarks as to the greater proclivity of patients to putrid absorption who suffered from hæmorrhage concurrent with putrid discharge, were also deserving of notice. He (Dr. Priestley) confessed his surprise that Dr. Hewitt, who had read the paper to the Society, should have so far misunderstood it as to suppose it recommended the introduction of the hand into the vagina when the placenta was simply lying in the os uteri, and easily removable by other means. The paper was entirely devoted to those embarrassing cases in which the placenta and membranes were entirely included within the uterine cavity, and in which the efforts of the uterus were insufficient for their expulsion. Nothing Dr. Hewitt had advanced had shown that the secundines could be left in the uterus for a prolonged period after abortion without risk to the patient. His objections did not affect the question at issue. Nor could the fears he expressed as to the safety of manual extraction be weighed against the results of practice which had been elicited in the discussion. One of the principal objects of the paper of the evening was to evoke the opinions of men who had large experience on an important point of every-day practice, and he (the author) had been gratified by finding that the weight of opinion expressed in discussion was decidedly in favour of the proposals he had submitted for the approval of the Society.

Correspondence.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—Some weeks have elapsed since I requested permission through the medium of your Journal to address the Poor-law Medical Officers. During this time, I have been actively employed in preparing evidence to lay before the Select Committee of the House of Commons on Poor-law Administration. I trust that many of my brethren have been similarly engaged; and that such a mass of evidence will be laid before the Committee as must convince the most sceptical member of it, that extensive changes are needed in the medical department of the Poor-law administration.

On the 18th April, I received a letter from the Poor-law Board, in reply to one I sent to them requesting information as to the time when Mr. Abel Smith's Return of the Salaries of the Poor-law Medical Officers up to Lady-day 1861 would be presented to the House of Commons, and also when I might expect to be summoned to give evidence before the Select Committee. Their reply is as follows: "I am directed by the Poor-law Board to acknowledge the receipt of your letter of the 10th instant; and to state that the Return to which you refer is in the course of preparation, and will, it is expected, be presented to Parliament within the next fortnight. I am directed also to state that the President of this Board is unable to inform you as to the time when you may expect to be called before the Select Committee on the Poor-law. He thinks it probable, however, that the Committee will not be prepared to enter upon any inquiry on the subject of medical relief within a month from this date."

I have received one guinea from Dr. Brown of Rochester, in aid of the funds of the Association: this is his sixth donation of a like amount; had the Poor-law medical officers done likewise, how different would have been our position. I have also received subscriptions from the officers of two metropolitan and a few country unions; but the entire sum received this year (£50) has only enabled me to pay off the old standing bills and to meet the current expenses of the Association, leaving me still in debt for printing the last draft Bill. Under these circumstances, I have not felt justified in incurring fresh liabilities by printing the mass of evidence I have collected; which I greatly regret, as its perusal might assist those gentlemen about to give evidence.

As a little statistical information may be interesting to your readers, I will give you the copy of a note appended to one of the tables which I intend to lay before the Select Committee. "During a period of six years, the average duration of illness in —— District has been 5 weeks, 3 days, 9 hours; average number of doses of medicine to each patient, 36; average number of attendances at patients' homes, 8.3; ditto at surgery, 1.3; average payment for the above, 1*s.* 10*d.*; which includes the payment for operations, midwifery, and accidents. The severity of many of the cases is proved not only by the average duration of illness, but by the mortality, which averages 1 in 19.9. If the deaths here recorded be a fair specimen of the general mortality amongst the sick poor throughout the kingdom, it will appear that the Poor-law medical officers alone return one-sixth of the entire deaths of the whole of England and Wales;" proving that the subject is one not merely affecting the Poor-law medical officers, but the poor and the ratepayers generally. I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, April 27, 1861.

INTERNAL STRANGULATION, etc.

Letter from Joseph Hinton, Esq.

Sir,—In one of your late numbers there is a report of a paper read by Mr. Gay, on the subject of strangulation of the bowels by bands. In that paper he brings forward certain positions as aids in the diagnosis of this difficult subject. Coming now with the weight of Mr. Gay's opinion, they will probably be more generally considered and acknowledged, than when propounded, as many of them were, by myself, in a paper read before the Bath and Bristol Branch of the Association, in March 1853. In that paper I endeavoured to draw attention to the fact that strangulation by bands, malposition of the bowel itself, and intussusceptio, resemble each other, and may, with advantage, be classed together, as giving the same type of symptoms and requiring the same treatment; moreover, they are the cases which require operative interference, and it is to such interference that Mr. Gay's paper seems to have referred.

Of the "evidences" denoting internal strangulation, Mr. Gay mentions:—1. An antecedent abdominal affection; 2. Suddenness of attack; 5. Vomiting, especially if it speedily become fæcal.

These three points have been previously insisted on by me in the paper referred to, which was published in the number of our Journal for May 20th, 1853, and I would again refer to the fifth "evidence," vomiting; because I believe, in these cases, it is preeminently *the early* symptom, often attacking the patient, as in the case I related, contemporaneously with the disease, and generally appearing within the first six hours.

Mr. Gay has added two other "evidences": 3. Pain, first localised, then tenderness over a large area; and 4. Distension, with general dulness at first, and subsequent concentration of dulness and tension towards the original seat of pain.

These are dependent somewhat on each other, and I believe are doubtful aids to the diagnosis. Every practical surgeon is aware that in strangulated hernia, where there is undoubted strangulation by band, the tumour is very often free from pain, the higher part of the abdomen being more generally the seat of uneasy symptoms. These two points I consider less satisfactory than the other; and so, indeed, does Mr. Gay appear to esteem them. I decidedly agree with him that, when these points can be satisfactorily brought out in the case, then the surgeon is perfectly justified in adopting operative measures.

A reference to my paper will show that there is not much novelty in these "evidences"; whilst, if there is any merit in them, it belongs rather to the humble individual who addresses you.

I am, etc., Joseph Hinton.

Hinton, near Bath, April 1861.

KING AND QUEEN'S COLLEGE OF PHYSICIANS.

Sir,—In the British Medical Journal of April 27th there is a letter signed "Delta". This relates to the powers granted by charter to the King and Queen's College of Physicians in Ireland. The writer has, indeed, most summarily dealt with the powers of that College; and, in support of his assertions, has given us some extracts from the charter explaining (according to his ideas) the exact interpretation of the passages he quotes.

As "Delta" seems interested in this matter, before giving these opinions publicity, he would have acted more wisely by taking advice of Sir H. Cairns and Mr. Hobhouse on the correctness of his suppositions. Such a course would have enabled "Delta" to form a correct judgment, and prevented his promulgating statements untrue and calculated to annoy some of his professional brethren who have received the diploma of the King and Queen's College of Physicians, after an examination which even "Delta" would find, on trial, not to be despised.

After having demolished the charter to his satisfaction, he next asserts that the licentiates of the above College are bound to practise as physicians only. Here, again, "Delta" betrays his ignorance of the true state of the case. No such declaration is required by the College.

Lastly, to crown all, he winds up with a *coup de grace*, that the license of the King and Queen's College of Physicians gives no medical status in England; consequently, the members are not entitled to practise medicine in this country. The following letter is the best answer to this.

"Medical Registration Office, 32, Soho Square, London, E.C.,
April 29th, 1861.

"Sir,—The only answer which I can return officially to your inquiry is, that a licentiate of the King and Queen's College of Physicians in Ireland, if registered as such under the Medical Act, is entitled by the thirty-first section of that Act to practise medicine in any part of Her Majesty's dominions.

"I am, sir, etc., "F. Hawkins, *Registrar*."

I trust "Delta" will now be convinced that on this subject he is by no means *au fait*.

I am, etc., A L.K.Q.C.P.I.

May 8th, 1861.

HOMŒOPATHY AND MR. ROBERTON.

Letter from S. Beecroft, Esq.

Sir,—I do not know when I felt so strongly the want of a strict moral principle in our profession, as after reading Dr. Thorburn's defence of Mr. Roberton.

I have been living in the hope that young physic entertained higher moral sentiments than to defend such a breach of faith, as the "Senior Vice-president of the Manchester Medico-Ethical Society" meeting, not only once, but several times, a homœopath in consultation, contrary to the explicit rules of the society of which he was vice-president.

For my own part, I think that Mr. Roberton ought to have been *expelled* from the society; nothing can excuse his conduct.

Let any of our Associates read the wise and enlightened moral letter of Dr. Barclay, in the same number of the Journal which contains Dr. Thorburn's; and can he help feeling sorry that we have even one amongst us ready to defend Mr. Roberton's conduct in the case before us? I do not know sufficient of medical feeling in Manchester to account for so many resident physicians and surgeons keeping aloof from the Medico-Ethical Society; since its rules contain nothing but what is acknowledged to be in accordance with professional ethics, and its *conversaziones* tend to produce that kindly feeling which is so much to be desired in a profession so likely, from extraneous influences, to produce dissensions and ill-feeling amongst us. I think it is to be deplored that so few of the profession join the society.

I thank you for your leading articles on the above subject, and am, etc.,

Samuel Beecroft.

Hyde, May 6th, 1861.

Medical News.

Royal College of Physicians of London. At the Comitia Majora, held on Friday, May 3rd—

Woodford, Charles Osmond, Calcutta,

previously an extra-licentiate of the College, was admitted a member.

At the same Comitia, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Crutchley, Henry, Market Drayton
Morgan, Herbert Major, Lichfield

Also, on April 19th:—

Clarke, Julius St. Thomas, Guy's Hospital,

passed the first part of the professional examination for the license of the College; and, on April 24th, the following candidates for the license passed the preliminary examination in the subjects of general education:—

Smith, Charles Edward, Coggeshall, Essex
Hudson, Ernest Arthur, 56, Queen Anne Street

Royal College of Surgeons of England. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 2nd:—

Atkins, Charles Alfred, Farnham Royal, Bucks
Burt, James, Newcastle
Corrie, James Johnstone, Carlisle
Cresswell, Nathaniel E., Canterbury
Dudley, Edward, Staveley, Chesterfield
Hainsworth, Joseph, Leeds
Harrison, Samuel Norton, Hull
Harrisson, John, Ealing, Middlesex
Hughes, William Hugh, Warrington, Lancashire
Hunstone, George, Manchester
Jones, Thomas, Llandissill, Carmarthen
Lovegrove, John, Sotwell Farm, near Wallingford

Lowne, Benjamin Thompson, Bartlett's Buildings, Holborn
Mahony, William Augustine, Commercial Road East
Meintjes, Stephanus Jacobus, L.M.Edinb., Cape of Good Hope
Milligan, Percy, Keighley, Yorkshire
Prangley, Thomas, Winchester
Ridsdale, William Everard, Otley, Yorkshire
Ryall, William Frederick, Plymouth
Thompson, William Allin, Park Town, Oxford
Webster, Marshall Hall, Dulwich

At the same meeting of the Court—

Carroll, Raymond Harvey, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College of Surgeons; his diploma bearing date April 1854.

The Fellowship. The following gentlemen have just passed the preliminary examination in Classics, Mathematics, and French, for the Fellowship of the College of Surgeons, and when eligible will be admitted to the pass examination:—

Orme, Charles Edward, St. John's Wood: diploma of membership dated January 30, 1861 (University College)
Streatfeild, John Tremlyn, Finsbury Square: June 11, 1852 (London Hospital)
Wolferstan, Sedley, Middlesex Hospital

University of Glasgow. The following degrees were conferred on April 24th, 1861:—

Doctors of Medicine.

Agnew, David, Scotland
Aitken, James M., Scotland
Alston, James, Scotland
Baker, John C., England
Cassells, Thomas, Scotland
Chalmers, William, Scotland
Christie, James, Scotland
Crawford, James, Scotland
Drysdale, John, Scotland
Farley, George C., England
Finlay, James, Scotland
Gaff, James D., Scotland
Grieve, Robert, Scotland
Hannah, John B., England
Kerr, Norman, Scotland
Lawrie, James, Scotland
Macaw, Kennedy, Ireland
M'Cartney, James, Ireland
Mackintosh, Angus, Scotland
M'Neely, Hugh, Ireland
Marshall, John, Scotland
Marshall, William, America
Mather, George R., Scotland
Miller, Hugh, Scotland
Murray, John, M.A., Scotland
Robertson, George, Scotland
Schmidl, Marcus M., Austria
Scott, Frederick B., England
Scowcroft, James P., England
Smellie, James, Scotland
Smith, Thomas J., England
Somerville, John, Scotland
Whitelaw, William, Scotland

Masters in Surgery.

Cassells, Thomas
Farley, George C., England
Finlay, James, Scotland
Gaff, James D., Scotland
Mackintosh, Alex. J., Scotland
M'Nab, Duncan, Scotland
M'Neely, Hugh, Ireland
Scott, Frederick B., England
Smith, Thomas J., England

APPOINTMENTS.

Middlemist, R. P., Esq., elected Surgeon to the Royal South London Dispensary.

Royal Navy. The following appointments have been made:—

Archer, Archibald L., Esq., Surgeon, to the *Rinaldo*.
Barker, William N., Esq., Surgeon, to the *Challenger*.
Carroll, H. H., Esq., Assistant-Surgeon, to the *Formidable*.
Fegan, Henry, Esq., Assistant-Surgeon, to Greenwich Hospital.
Fisher, Alexander, M.D., Assistant-Surgeon, to the *Revenge*.
Graham, William, Esq., Acting Assistant-Surgeon, to the *Driver*.
Maclaurin, Henry N., M.D., Assist.-Surgeon, to the *Marlborough*.
Nelson, Robert, Esq., Acting Assistant-Surgeon, to the *Rinaldo*.
Purves, Robert, Esq., Assistant-Surgeon, to the *Victory*, for Haslar Hospital.
Wallace, James M. E., Esq., Surgeon, to the *Driver*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Buzzard, T., M.B., to be Surgeon Queen's Westminster R.V.

To be Honorary Assistant-Surgeons:—

Blackwood, T., Esq., Dumbartonshire R.V.
Bunce, J. S., M.D., 24th Essex R.V.
Henry, M., Esq., 2nd Middlesex Light Horse Volunteers.

DEATHS.

Damant. On April 27th, at Litcham, Mary F., widow of the late Castell Damant, Esq., Surgeon, Fakenham.

Dowers. On April 29th, at 18, Assembly Row, aged 86, Elizabeth Mary, widow of George Dowers, Esq., Surgeon.

Freer, John, M.D., at Exeter, aged 75, on May 2nd.

Hulke. On April 30th, at 10, Old Burlington Street, aged 18, Victor, youngest son of William Hulke, Esq., Surgeon, Deal.

Kirkes. On May 6th, in Lower Seymour Street, aged 4 years and 10 months, Alice Anne, only child of W. S. Kirkes, M.D.

Maitland, John, M.D., 2nd European Light Infantry, at Coonoor, India, on March 23rd.

Major, D. B., Esq., Surgeon, at Canterbury, aged 59, on May 3rd.

Muriel. On May 1st, at Wickham Market, Katherine Lynn, infant daughter of W. G. Muriel, Esq., Surgeon.

Seaton. On May 3rd, at 33, Sloane Street, aged 17, Julia Ougley, daughter of *Edward C. Seaton, M.D.

Thompson, Seth, M.D., at 16, Lower Berkeley Street, aged 54, on May 8th.

Dr. Geo. S. Walker, of St. Louis, having become a homœopath, has been expelled from the St. Louis Medical Society.

A Bequest in Support of Female Medical Education. The late Hon. John Wade, of Woburn, America, has left over 20,000 dollars in value to the Female Medical College of Philadelphia.

Typhus in Vienna. The typhus fever, which has been prevalent in Vienna for some time, has suddenly assumed an epidemic form. The hospitals are crowded to excess.

The American Association for the Advancement of Science was to have met at Nashville, Tennessee, on April 17th; but we understand that the meeting is postponed for one year, owing to the disturbed state of the country.

Civic Liberality. At a meeting of the Common Council, last week, one hundred guineas was awarded on the recommendation of the Coal, Corn and Finance Committee to augment the funds of the National Hospital for the Paralytic and Epileptic.

Middlesex Hospital. A notice has been issued from the Governors of Middlesex Hospital to the effect that persons afflicted with cancer will be attended to as out-patients, and, if necessary, be admitted as in-door patients, without orders or letters from Governors; the object being to extend the advantages offered by this very useful institution, and to make them more easy of attainment.

The Levee. At the Levee held on Saturday last by His Royal Highness the Prince Consort, there were presented—Deputy Inspector-General, W. Maclean, M.D.; Inspector-General of Hospitals, Dr. Muir, C.B.; and Dr. Paul. Among those who attended were—Drs. Ferguson, Waller Lewis, Meryon, Winslow, Ruttledge, Pickford, Granville, and Surgeon McSwiney, R.N.

The Royal Society. There were forty-eight candidates for the fellowship this year, but the Council of the Royal Society have recommended only fifteen gentlemen for election—namely, Mr. C. S. Bate, Mr. H. Debus, Mr. C. De Morgan, Mr. T. A. Hirst, Mr. Matthiessen, Mr. J. C. Maxwell, M. F. Muller, Mr. W. Newmarch, Dr. E. A. Parkes, Mr. W. Pole, Mr. P. L. Sclater, Captain C. F. A. Shadwell, Mr. H. J. S. Smith, Dr. W. Stokes, and Mr. G. J. Stoney.

Ceylon. Government has decided on building a large sanitarium and hospital for soldiers on the healthy plains of Neweralia, in the centre of Ceylon, at a height of about 8,000 feet above the level of the sea, double that at which the military station at Newcastle, in St. Catherine's Mountain, in Jamaica, is situate. Captain De Butts, of the Royal Engineers, has been ordered from Kandy to put the design into execution. Although situated nearly on the Line, the cold of Neweralia, in contrast with the heat of Colombo and of the lower plains, is intense. Ice sometimes forms of the thickness of a half-crown, and European invalids rapidly regain health and strength, particularly after attacks of cholera and diarrhœa, which in that part of the world are so prevalent. (*Army and Navy Gazette.*)

Royal College of Surgeons: Prizes. The following prize subjects are now offered by the Council of the Royal College of Surgeons of England for competition amongst the Fellows and Members of that institution. The subject of the collegial triennial anatomical prize of fifty guineas is "The Anatomy and Physiology of the Suprarenal Bodies."—There are two Jacksonian prizes of twenty guineas for the present year, viz.: "The Structure and Disease of the Lacrymal Passages at the Inner Side of the Orbit, being those between the Conjunctiva and the Nasal Cavity;" and "The best method of effecting the Radical Cure of Inguinal Hernia, explaining the Principle of the Operation adopted."—There are also two subjects for the Jacksonian prize for the ensuing year, 1862, viz.: "The relative value of the treatment of Popliteal Aneurism by Ligature and by Compression;" and the other on "The Healthy and Morbid Anatomy of the Tonsils, and the appropriate treatment of their Diseases."

St. Mary's Hospital. A dinner of the friends of this institution was held on the 8th at Willis's Rooms, the Duke of Cambridge in the chair. His Royal Highness in proposing the toast of the evening, "Prosperity to St. Mary's Hospital," dwelt on the necessity which existed for maintaining in every part of the metropolis charitable institutions, where the sufferings of the destitute poor could be alleviated. In the course of a visit paid to the Hospital unexpectedly on the previous day, he was convinced, by the result of a detailed inspection, that in no part of the world had he seen an institution more satisfactorily conducted, or in which habitual cleanliness was more strongly evidenced. Of the total expenses of £7,000, but £4,000 was made up by annual subscriptions, and for the remainder the society, having unfortunately no endowment, was forced to depend on casual assistance.

Is the Inhalation of Ether Absolutely Free from Danger? The Boston Society for Medical Improvement has appointed a committee "to investigate the alleged deaths from the inhalation of *sulphuric ether*, and to report thereon." The members of the committee are Richard M. Hodges, M.D., George Hayward, M.D., Solomon D. Townsend, M.D., Charles T. Jackson, M.D., and J. Baxter Upham, M.D. The committee request the medical profession, or any person whatever, into whose hands this may fall, to communicate to either of them such cases, coming within their own observation, as shall serve to the investigation, and report, giving the place, time, and circumstances of their occurrence, with the mode of inhalation adopted, and especially information in regard to the following points: 1. The kind of ether used, whether pure sulphuric ether, chloric ether, or ether combined with chloroform; 2. The period after inhalation at which death occurred; also, any other facts which may enable them to form an opinion on the subject of their investigations.

Death of Mrs. Agnes Baillie. The announcement of a recent death has caused some sensation in society. Mrs. Agnes Baillie, the sister of Joanna and Dr. Baillie, is dead at the age of 100. A letter of Mrs. Barbauld, dated in 1800, tells of the outburst of Joanna's fame, a year or two after the anonymous publication of her *Plays on the Passions*,—"a young lady of Hampstead who came to Mrs. Barbauld's meeting with as innocent a face as if she had never written a line." At the time of the Treaty of Ghent, Mr. Clay, the American commissioner, was advised to call in Dr. Baillie, as a physician of long-established fame. A quarter of a century since Joanna and Agnes had settled their affairs precisely alike, and arranged everything, each for the other, wondering how the survivor could live alone. They lived on together till long past 80; yet Agnes has been the solitary survivor of her family for so many years that it was a relief—though still a reluctant one—to hear that she was gone. With those women—simple, sensible, amiable, and gay in temper, and of admirable cultivation, apart from Joanna's genius—a period of our literature seems to close; and we are all weak enough to sigh at times over what is inevitable. (*Once a Week.*)

University College, London. At their session on Saturday last the council was informed by Mr. Mellor that the Right Hon. William F. Cowper, M.P., had accepted their invitation to preside at the distribution of prizes to the students of the Faculty of Medicine of the college. On the recommendation of the Faculty of Medicine, Professor Ellis was appointed Examiner for the Atkinson Morley Surgical Scholarship, jointly with the permanent examiners—viz., the Professor of Clinical Surgery (Mr. Quain), the Professor of Surgery (Mr. Erichsen), and the Professor of Ophthalmic Surgery (Mr. Wharton Jones); and Mr. Marshall was appointed Substitute Examiner. Mr. Charlton Bastian and Mr. William John Smith, having obtained from the Faculty certificates of the competency of their knowledge of anatomy, physiology, chemistry, and medicine, were admitted candidates for the scholarship. On the recommendation of the senate the council determined that henceforth the professorship of physiology (now held by Dr. Sharpey) should be attached to the Faculty of Arts as well as to the Faculty of Medicine.

Sudden Death. A great shock was given to Bury St. Edmund's by the sudden death, a short time ago, of Dr. Probart, the senior physician of the hospital and a magistrate for the borough and county. He had been somewhat enfeebled since a fall from his horse some time ago, but was still possessed of mental and bodily vigour scarcely to be expected at his age, verging on fourscore. On the afternoon in question he rode out alone on the Newmarket-road, and about half a mile beyond the Risby turnpike he was seen by some men on the road to dismount, and in mounting again, as it would seem, from a small hillock of earth he fell forward, and his horse started away and ran off. Another man stopped the horse, and on coming up to its rider, whom he did not know, found him apparently breathing his last, the appearance of his face plainly indicating that the cause of death had been apoplexy. The body was immediately brought home to his residence; his son, Captain Probart, who recently returned home after a long absence, and daughter, having in the meantime been prepared for the sad event. Dr. Probart had long occupied an eminent position in his profession, and in public affairs as well as in private society, and the benefit of his advice was freely afforded to the poor. A vacancy in most of the public trusts of the town is occasioned by his death.

Vivisections. The Emperor received on the 14th inst. in private audience a deputation from the Royal Society of London for Prevention of Cruelty to Animals. Mr. Curling, chairman of the committee charged with this mission, explained its object, and laid before His Majesty a statement touching certain veterinary schools in France, such as Alfort, Lyons, etc., and where the most cruel experiments were practised. These were regarded by the society as utterly intolerable, and made it an imperative duty to appeal to His Majesty to suppress those particularly which occurred at Alfort. They were exceptional cases to the question of "vivisection" for scientific purposes, in which the society in London was anxiously occupying itself, with a view of obtaining a solution of the great question now agitated of its utility or non-utility, and on which there is considerable difference of opinion. His Majesty was prayed to aid in the efforts making in England on "vivisection" generally, so as either to prohibit, or rigidly curtail, under penalties, its improper exercise. It was set forth by Mr. Curling that during sixteen weeks of the year, between March and July, on each Monday and Thursday at nine o'clock in the morning, some seven or eight wretched horses, previously bought at a low price, and kept from twenty-four to forty-eight hours without any food whatever, are "cast," that is, thrown on the ground, and rendered helpless; and thereupon operations, some of them of the most exquisitely painful character, and under the hands of no less than eight pupils, to each of whom a separate operation on the same horse is assigned, commence, and are continued until five o'clock in the evening, the animal suffering in the meantime the most excruciating torture. One of the pupils practises upon the eyes, another bleeds, another uses cupping, another actually removes an entire hoof, and another operates for (imaginary) stone, etc. The emperor expressed his surprise at the existence of these practices, of which he had been ignorant, expressed himself very energetically on them, and promised an immediate inquiry. He expressed his great sympathy with the benevolent views of the society, and the satisfaction he had in seeing the deputation.

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.
Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.
Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.
Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.
Friday. ...... Westminster Ophthalmic, 1·30 p.m.
Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Royal Geographical.

Tuesday. Royal Medical and Chirurgical, 8.30 p.m.: Dr. Waters (Liverpool), "On Asphyxia, and on the Use of the Hot Bath in Suspended Animation"; Dr. H. Weber, "On Disease of the Pons Varolii."—Zoological.

Wednesday. Society of Arts.—Pharmaceutical (Anniversary).—Ethnological (Anniversary).

Thursday. Zoological.— Royal. —Antiquarian.— Chemical.— Harveian, 8 p.m.

Friday. Royal Institution.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—May 4th, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week.....................	Boys .. 951 Girls..1057	2008	1261
Average of corresponding weeks 1851-60		1717	1220

Barometer:
Highest (Tu.) 30.140; lowest (Tu.) 29.868; mean 30.026.
Thermometer:
Highest in sun—extremes (Sat.) 109 degs.; (Sun.) 86 degs.
In shade—highest (Th.) 64 degrees; lowest (Sun.) 29.1 degrees.
Mean—46.3 degrees; difference from mean of 43 yrs.—3.7 degs.
Range—during week, 34.9 degrees; mean daily, 21.2 degrees.
Mean humidity of air (*saturation*=100), 74.
Mean direction of wind, N. & N.W.—Rain in inches, 0.13.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Benzoated Zinc Ointment.—Mr. Dulvey has favoured us with the following formulæ in answer to Mr. Tasker's inquiry:—"(1.) Dissolve two scruples of finely powdered gum benzoin in half an ounce of rectified spirit by the aid of heat, and filter. Mix this tincture with a drachm of oxide of zinc, and add the paste thus made to one ounce of prepared lard. (2.) Take half a drachm of benzoic acid, three drachms of oxide of zinc, and two ounces of prepared lard. Mix them carefully.....I published," he adds, "in the British Medical Journal of April 23rd, 1859, the details of a case where this ointment was most beneficial."

Another authority writes:—"The formula was published in the *Pharmaceutical Journal*, vol. xiv, page 207. The ointment is made by stirring in benzoin with the melted lard, in the proportion of ten grains of the benzoin to an ounce of lard, and allowing the benzoin to subside, and then strain before adding the oxide of zinc. Mr. Erasmus Wilson frequently orders the above, with the addition of one drachm of spirit of wine to an ounce of the ointment."

Mr. W. W. Morris has also forwarded a formula.

Dr. John Mayne asks:—"Supposing the familiar and allowable circumstance of a duly authenticated communication being sent, by post, to the editor of any periodical—say to some medical journalist—*for his special information*, the subject contained being matter of opinion, utterly free from personality, and not in any way affecting the interests of such editor or his publication; and said communication bearing on its face the words *private and confidential*—is the party receiving such *private* letter at liberty to disregard the decided injunctions or restrictions just mentioned; and not merely to print quotations from said document, commenting freely thereon, but to openly avow receipt thereof; and at the same time publicly to name its author in the columns of his journal? For my own part, I am in ignorance of a prescriptive right belonging to any editor whatever, by virtue of which he may, at will, betray the trust thus sacredly reposed in him. Nor can I imagine the species of logical jugglery, that the party guilty could attempt to employ in palliation of the delinquency referred to."

[We should say that a disregard of injunctions of the nature above referred to, and under the circumstances detailed, is utterly unjustifiable on the part of an editor.—Editor.]

SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

Philip H. Williams, M.D., *General Secretary.*

Worcester, May 1861.

COMMUNICATIONS have been received from:—Mr. William Copney; Dr. Graily Hewitt; Mr. W. W. Morris; Mr. James Dulvey; Mr. W. Legge; Dr. Munroe; Mr. Lawson; Mr. Thos. Underhill; Dr. Davey; Dr. Beale; Mr. T. M. Stone; Mr. S. Beecroft; Mr. J. P. Pennefather; Sir Charles Hastings; Dr. Potter; and Dr. John Mayne.

BOOKS RECEIVED.

1. Operative Surgery, adapted to the Human Subject. By C. F. Maunder, F.R.C.S. Part II. London: 1861.
2. Meteorological and Medical Observations on the Climate of Egypt, with Practical Hints for Invalid Travellers. By Donald Dalrymple, M.D. London: 1861.
3. Obstetric Aphorisms: for the Use of Students in Midwifery Practice. By Joseph Griffiths Swayne, M.D. Second edition. London: 1861.
4. A Practical Treatise on the Diseases of the Sexual Organs of Women. By F. W. von Scanzoni. Translated from the French. By Augustus K. Gardner, A.M., M.D. New York: 1861.
5. On Surgical Diseases of Women. By I. Baker Brown, F.R.C.S. Second edition, revised and enlarged. London: 1861.

PURE SPIRITS FOR THE FACULTY.

S. V. R. 56 O.P., 21s. net Cash.—This quotation admits of neither credit nor discount, and 1s. per gallon must be added for packages, to be allowed on their return.

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The *Edinburgh Medical Journal.*
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Pepsine.—The Liq. Pepsiniæ, as used and recommended by Dr. NELSON, can be had from Messrs. W. & C. R. TITTERTON 6, Snow Hill, Birmingham.

J. & E. BRADSHAW, late

Shoolbred and Bradshaw, 34, JERMYN STREET, beg to call attention to the various improvements in PATENT ELASTIC STOCKINGS, BELTS, KNEE-CAPS, SOCKS, and Ladies' and Gentlemen's SPINE SUPPORTERS. A new description of BELT, invaluable for prevention of Cholera, and the cure of Rheumatism, Lumbago, etc. N.B. Every description of INDIA-RUBBER BANDAGE, vulcanized on the newest principle.

Directions for measurement sent by post.—N.B. A liberal Discount to the Profession.

A female to attend on Ladies.

PULVIS JACOBI *VER.*, NEWBERY'S.

To the Medical Profeſſion of Great Britain and Ireland.

GENTLEMEN,—We beg to call your attention to the following extracts from a Paper by the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke Fever Hoſpital, Dublin, and Phyſician-General to His late Majeſty's Forces in Ireland, &c., &c., contained in "*The Dublin Hoſpital Reports*," *vol.* 1, *p.* 317.

"Since this caſe came into my poſſeſſion, I have been led to make a good many clinical experiments, which
"have enabled me to verify the reports which I had heard of the efficacy of JAMES'S POWDER, in ſometimes
"removing the APOPLECTIC DIATHESIS in perſons advanced in life. It is, moreover, worthy of obſervation, that
"JAMES'S POWDER has been of remarkable utility in certain inſtances of DETERMINATION OF BLOOD TO THE
"HEAD, which occurred at an early period of life, and threatened to end by effuſion. Laſtly, in two caſes of
"GENERAL PLETHORA, in which, however, the head was more affected than any other part, JAMES'S POWDER
"was exhibited by me with perfect ſucceſs."

Also *vol.* 1, *p.* 320.

"The following very ſimple method of exhibiting JAMES'S POWDER, in cases of undue determination of
"blood to the head, is that which I have generally purſued. The patient is made to begin with a very moderate
"doſe, not more than two grains at bedtime, and to increaſe the doſe by half-a-grain every night, until ſome ſensible
"effect is produced upon the ſtomach, bowels, or ſkin. Should the ſtomach be affected with ſickneſs, the doſe
"muſt be leſſened by one grain on the following night. *By the addition of a little rhubarb to it a larger quantity*
"*of JAMES'S POWDER may be adminiſtered than the ſtomach could otherwiſe bear.* If the ſkin is ſoftened, or
"the bowels affected, the doſe ſhould not further be increaſed, but it muſt be repeated every night for a conſiderable
"length of time: in ſeveral inſtances I have known eighteen or twenty grains taken for a conſiderable period without
"any inconvenience."

The following extract (ſhowing the increaſing eſtimation in which the true Dr. James's Powder is held by Medical Practitioners) is taken from "The Lumleian Lectures," 1858-59, delivered before the Royal College of Phyſicians, by A. Tweedie, M.D., Phyſician to the London Fever Hoſpital, who is admittedly one of the higheſt practical authorities on the ſubject of Fever. He ſays (the *Lancet*, *June* 16, 1860, p. 590), as follows:—

"If the febrile excitement be ſuch as to require antimonial preparations, a pill containing 2 or 3 grains of
"James's Powder (prepared by Newbery) ſhould be taken at intervals according to circumſtances."

In writing to Meſſrs. Newbery, he ſays:—

"I wish that your preparation was always uſed."

To ſecure the diſpenſing of the *original* preparation, which, for 114 years, has been ſold by the houſe of Newbery and Sons, in St. Paul's Churchyard, it is neceſſary to preſcribe it as "PULVIS JACOBI VER., NEWBERY'S," otherwiſe another article (wanting in the beſt properties, and recommended to be given in a different code of dose, *though called by the ſame name*) may be ſubſtituted for the original medicine.

This ſubſtitution muſt bring diſappointment, and of courſe deter Practitioners from preſcribing Dr. James's Powder, or lead them to regard it as a preparation on which no dependence can be placed.

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Clinical Lecture

ON

HEREDITO-SYPHILITIC STRUMA: AND ON THE TEETH AS A MEANS OF DIAGNOSIS.

DELIVERED AT THE LONDON HOSPITAL.

BY

JONATHAN HUTCHINSON, Esq.,
ASSISTANT-SURGEON TO THE HOSPITAL, AND LECTURER ON SURGERY.

Gentlemen,—In going through Sophia Ward on Monday last, our attention was, as you will remember, drawn to the case of a little girl who is suffering from a large ulcer on the front of her leg.

Sarah W. is a child of fairly healthy aspect, aged 11. The disease for which she is under treatment is a large oval ulcer on the front of her right leg, which has laid bare about two inches of her tibia. The ulceration has evidently been, indeed it still is, of the type of chronic phagedena. The edges are undermined; they present a livid or gray surface, and are destitute of granulations. A week ago, Mr. Powell, at my request, applied the strong nitric acid to certain parts of the edge, where the ulceration was most inclined to spread, and with decidedly good effect; although the sore did not take on healthy action.

On two occasions, as you are aware, we had passed this child without arriving at anything definite as to the diagnosis of her affection. On Monday, however, my attention was drawn to the very unusual features which the ulcer presents; and the question suggested itself to my mind—Could it depend upon an inherited taint of syphilis? Following up this idea, we looked at her teeth, and found that her upper incisors were of very peculiar shape, and, in fact, of the type most characteristic of the taint in question. We learnt, on inquiry, that she is the eldest, and, indeed, the only living child, of her parents. Her mother is stated to have had several others, but they are all dead. Further than this we had no opportunity for pursuing the family history, as neither her father nor mother was present.

On looking into her throat, we found that her uvula and soft palate had been extensively destroyed by ulceration; a condition of things which, I need not say, strongly confirmed my opinion. These discoveries at once changed my view of the case; and, instead of considering it as simply a disease of debility, I regarded it as one of specific taint to be treated by specific remedies. The quinine and cod-liver oil which she had been taking were discontinued, and iodide of potassium in full doses was prescribed. The result of this change was that, in a few days, the edges of the sore have assumed a freely granulating condition.

In this instance, the usefulness of the teeth as a means of diagnosis was very forcibly illustrated. Usually, the subjects of inherited syphilis display in their physiognomy peculiarities sufficiently well marked to lead, if not to a positive opinion, at least to a strong suspicion. They show, in nine cases out of ten, a very pasty, pallid skin, and a drawn, haggard expression of face, as of premature old age. The bridge of the nose is almost always sunken and broad, and there are frequently little pits or cicatrices about the cheeks and forehead, and symmetrical linear scars extending from the angles of the mouth. In Abigail Hammond, a girl who occupies a bed in the next ward, suffering from disease of the knee-joint, all these peculiarities are very noticeable; and the *tout ensemble* of her visage would attract the attention of even a careless observer. She has also suffered from interstitial keratitis, which has left both her corneæ hazy; whilst both pupils are notched and irregular, from the effects of a bygone attack of iritis.

Sarah W., however, although not robust looking, does not differ materially in appearance from hundreds of other children of her age. We had, as I have said, prescribed for her on two occasions without suspecting the true nature of her disease. It was her teeth, and her teeth only, which led me to give a confident opinion as to her diathesis, and to alter the treatment of her case. Now, however, that we have gained this knowledge, it is easy to see that there are suspicious features in the ulcer itself. Notice the surface of the exposed bone. Instead of being smooth and even as that of a healthy tibia should be, it is raised, worm-eaten, and like pumice-stone, remarkably resembling what we often see on the skull when exposed by the ulceration of a syphilitic node. It is clear that the disease has begun in chronic periostitis, and that thickening of the exterior of the bone has preceded the phagedenic ulceration by which the surface has been exposed.

We will, however, for the present, restrict our attention to the teeth as a means of diagnosis of hereditary taint. On this important symptom, I will offer for your guidance the following observations:—

1. Remember that it is the permanent set only which show any peculiarities. The milk-teeth of syphilitic infants, although liable to premature caries, shew no peculiarities of form.

2. *The central upper incisors are the test-teeth.* You may neglect all the others; for, although malformations are often observed in them also, as, for instance, a rounded peg-like form in the lower incisors, yet there is nothing that is trustworthy, and much that is liable to mislead. Look at once at the two upper central incisors; and if they be broad, well-made teeth, you may throw away suspicion as far as dental indications are concerned.

3. The peculiarities of the central upper incisors which denote hereditary syphilis are well shewn in the two patients to whom I have referred, and in the sketches which I now exhibit. The teeth are short and narrow. Instead of becoming wider as they descend from the gum, they are narrower at their free edges than at their crowns, their angles having been, as it were, rounded off. In the centre of their free edge is a deep vertical notch, made by the breaking away or non-development of the middle lobe of the tooth-crown. This notch, taken together with the narrowness and shortness of the tooth, is the main peculiarity; but you will observe also that the colour of these teeth is not good. Instead of looking like ivory with a thin coating of pearl, they present a semi-translucent appearance, not unlike that of bad size, as we see it displayed in the oilmen's shops.

In respect to the value of this symptom, I may express the utmost confidence in it. I frequently see sets of teeth so characteristic that, without asking for any other knowledge, I would venture a positive opinion as to their possessor having suffered in infancy from inherited syphilis. In the majority, of course, the peculiar features are less well marked, and furnish only one among many symptoms on which to base a diagnosis. It is only by long practice in the observation of the malformations of teeth, that dexterity in using them as means of diagnosis can be obtained. You must at first exercise the utmost caution, or you may be misled into great errors. Remember that it is not all irregular or misshapen teeth which indicate hereditary syphilis. *The commoner and more conspicuous varieties of malformation have, indeed, nothing to do with that disease.* Craggy or "rocky" teeth are not syphilitic; "honey-combed" teeth (eaten into little pits on their surfaces) are not syphilitic; as a rough rule, teeth which are much broken have nothing to do with the syphilitic type. Whenever you see a whole row of front teeth marked by a horizontal line or furrow, which crosses them midway between the neck and the edge (or nearer to the latter), and at the same level on all, you may, for the most part, dismiss the suspicion of syphilis. It is the notching and dwarfing of the upper central incisors which constitutes the only condition to which suspicion ought to attach. As I have stated, this condition is, as compared with certain others ("honey-combed," "rocky teeth," etc.), but rarely met with. The great usefulness of this symptom consists in the fact that it is objective and indelible. You need ask no questions; but have simply to observe and draw your own conclusions. In many, indeed in a majority, of the cases in which hereditary syphilis is suspected, you are precluded, by the fear of causing family mistrust, from putting any direct questions. In most instances, the taint has been derived from the father, who had suffered from syphilis before marriage. The mother of the child is not unfrequently in entire ignorance of the nature of its malady; and it would be unkind and very wrong to excite her suspicions. In seeking for corroborative testimony, after having inspected the teeth, you will proceed with great circumspection. It is a good plan to ask if the child suffered much when cutting its first teeth, if measles, scarlet fever, etc., occurred in infancy. Such questions will generally elicit what you want to know, without conveying any hint whatever as to your own view of the case. If you are told that when a baby the child was very ailing and puny, suffered from rash, had "thrush" badly, and was much troubled with snuffles, it will not be needful to push the investigation much further. You may ask if the "thrush went through it"; and the answer you will receive will often inform you as to whether the child had condylomata at the anus. The children who suffer severely from hereditary syphilis are usually the eldest in the family. Almost always those who present well characterised teeth are the eldest living. Very often there have been either still-births, or several have died in infancy, who, if they had lived, would have been older than the patient; but still, almost always, the latter is the oldest living. This circumstance is, of course, easily explained by reference to the fact that the parental taint has usually been acquired before marriage, and is, with the lapse of years, gradually wearing out. I have, in many instances, found the eldest child of a syphilitic family with notched teeth and senile physiognomy; the second child presenting similar features in a less marked degree; the third less still; and the fourth or fifth appearing to be in good health, and free from any peculiarity either in teeth or features.

That the syphilitic taint existing in the parents is peculiarly fatal to the life of the offspring, is an undoubted fact. In many cases a syphilitic husband is not fecund, and no conceptions occur. In others, two or three miscarriages happen soon after marriage, and then the woman ceases to conceive; whilst in others, and the larger proportion, a succession either of premature births, or of tainted infants destined to die within a few months, occurs. The number of infants inheriting the syphilitic taint in a severe form who are ultimately reared is, I suspect, but small. I shall bring before you this afternoon three patients, the undoubted subjects of inherited syphilis, and you will notice that in each instance the patient is an only child. All of them are girls, another fact worthy of notice. To whatever cause it may be assigned, there is no doubt that a larger proportion of our patients with this form of disease are females. I suspect that this is so because a larger number of male conceptions end in abortion.

I will now ask your attention to the case of Ann Inkpenn, a little girl aged 7, whom we admitted yesterday. She comes on account of angular curvature of the dorsal spine, attended with iliac abscess, which has opened in the right groin. Her physiognomy is markedly syphilitic, the skin being thick and sallow, the bridge of the nose flat, and the lips puckered by cicatrices. She has as yet not cut any of her permanent teeth. Let us look at the state of things in her mouth. You will observe that she has lost all her upper incisors and her two lower central ones; the gums are quite sound, and look as if the teeth had been out for long, and her mother tells me that it is more than four years since they fell. I told you just now that the milk-teeth are not affected, as regards their form, by hereditary syphilis, but that they are liable to premature caries. This early caries, I may add, usually affects the upper incisors; that is, the same teeth which, in the permanent set, shew the most characteristic deviations from the normal form. It is very common, indeed, for these patients to lose their front teeth several years before those of the second set appear.

The history of the patient now before us (Inkpenn) we obtained very easily. Having first mentioned to those of you who were then present my opinion as to the nature of the case, I simply asked her mother whether the child was healthy as a baby, and was at once told that she had suffered most severely "from the disease from her father." It appears that for years she was puny and very ailing, that she had snuffles, a bad rash over the body, and "thrush in the mouth," which, if we interpret, probably means syphilitic stomatitis. You will notice that she has a divergent strabismus, her right eye looking outwards.

Ann Inkpenn is the subject of caries of the bodies of the dorsal vertebræ; Sarah W. has disease of her tibia; and in the case of the third patient, Abigail Hammond, there is chronic disease of the knee-joint. All three would, a few years ago, have been considered "strumous" in a marked degree; indeed, the form of ophthalmia from which Hammond has suffered is designated in most ophthalmic treatises as *par excellence* "*strumous* corneitis." Very vague, as you know, is the meaning usually attached to this word "struma." If, however, names are to be of any use as indicative of a knowledge of the causes of the malady designated, we must insist upon its receiving a modifying addition in the present instances. These patients are not "strumous" in the sense of being liable to tuberculous affections, or likely to die of phthisis, nor do any of them show tendency to disease of the lymphatic glands. There is no reason for believing that the diseases from which they suffer are other than the direct consequences of the specific taint derived from their parents. The treatment likely to be most useful in each instance is that of tertiary syphilis, namely, full doses of the iodides and small ones of mercurials, whilst comparatively little good would come of the use of tonics and cod-liver oil. The distinction between tubercular struma and heredito-syphilitic struma* is, therefore, one of the utmost importance.

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* The word "struma", to which some may object in the sense here used, has been retained after much consideration. We have no other word by which to designate the state of constitutional peculiarity to which reference is made. There is no doubt but that the various affections incident chiefly to childhood and the pre-adult period, which have hitherto been classed as struma, and will be so styled for many years, are yet really due to a variety of morbid causes. Some occur in the tubercular diathesis, some are the direct consequences of one or other of the exanthems, some are due to inherited syphilitic taint, whilst others appear to be chiefly due to a peculiarly feeble state of the capillary circulation. It is quite possible to group the various strumous disorders in relation to their different causes, though very frequently the result is complicated by the coexistence of several of the influences mentioned. Instead, however, of attempting to disuse the term struma altogether, I would propose to acknowledge that it is, when used alone, destitute of all precision as to the exact pathology of the disorder so designated, and to habitually append to it the adjectives, "tubercular", "heredito-syphilitic", "post exanthematous", etc., as the case may be.

Solid Matter in the Water. "The quantity of solid matter," says Dr. E. Frankland, "contained in the water varies from five to fifty grains per gallon. When this quantity is exceeded the water generally acquires a taste, and may be regarded as *abnormal* water. The water of the ocean is in this condition. The rivers which flow into the sea carry with them matters dissolved, and leave them there, for the solid matters are not carried back by evaporation. Therefore, the sea contains a larger proportion of these substances than is contained in the water of rivers; and we get this effect on a still more exaggerated scale when in hot climates rivers empty themselves into lakes which have no outlet. This is the case with the Dead Sea. The river Jordan which is constantly flowing into it contains seventy-five grains of solid matter in the gallon; and none of this matter is returned again into the atmosphere, or no practical amount; therefore there is a constant accumulation of the saline matters going on there, and in this Dead Sea we have no less than two thousand six hundred grains of solid constituents to the gallon of water. The same effect takes place in a very recently-discovered lake in the north of Australia, a lake discovered a few months ago. It is highly charged with saline matters, and is known to possess no outlet. There is a similar instance in the celebrated Elton Lake in Russia, which is eleven miles long, eight miles broad, and on an average only fifteen inches deep. In summer it appears to be covered with snow in consequence of the evaporation of the water forming a crust of saline matter. No less than two hundred thousand tons of salt are yearly extracted from this lake." (*Chem. News.*)

Original Communications.

EXCERPTS FROM DAILY PRACTICE.

By Alfred Fleischmann, Esq., Fellow of the Obstetrical Society, late Physician-Accoucheur Assistant to King's College Hospital.

I.—Diagnosis of Tumours.

Some cases showing errors in diagnosis as to the nature of certain tumours having recently been noticed in the medical journals, I trust the following example, occurring in my own practice, will not be without interest to the profession.

Three months ago, a farmer's widow, aged 64, asked me to remove a tumour of the size of a pullet's egg, which was present over the nape of the neck, exactly in the median line. It had existed for six months, and for the last six weeks had rapidly increased, Since its appearance, it had been painless, except for two nights before I saw her. The occurrence of pain, together with the rapid growth, induced her to apply for aid. The tumour was superficial, moderately resilient to the fingers, very circumscribed, moving freely over the subjacent tissue; and the skin, though somewhat adherent, was perfectly healthy. There was no suspicious family history. The patient's own health up to the present time had been good, but some of the neck-glands were decidedly enlarged. On my remarking this to the patient, she positively assured me that at the time she had a cold; and that, when this was the case, her neck-glands invariably sympathised; that they had been in that condition a few days only; that, since the existence of the tumour, they had once before enlarged, and again entirely subsided. She assured me this with so much emphasis that I was disposed to give full credit to her belief, and considered the tumour to be steatomatous. She had previously shown it to another medical man, who, from what I could learn, had formed a similar opinion.

Two days after consultation, I operated; and, on transfixing the base of the tumour, I found I had certainly made an error. The incised tumour appeared of a dull, non-vascular, opaque white. Fearing malignancy, I now made a clean removal (skin included), which, from the circumscribed character of the mass, was not difficult. I then secured the wound with silver suture, and hoped the end might justify the means.

Examination by the unassisted eye and by the microscope made me none the more satisfied; and I forwarded a portion of the tumour and an outline of the case to an eminent surgeon and microscopist, saying that I feared its malignancy, and that to my eye it appeared to consist of spheroidal granular cells, with, as far as I could make out, very sparing if any fibroid stroma. He confirmed these appearances, and added: "I am disposed to regard it as a non-malignant growth. In some respects it is not unlike the more solid molluscous tumours; not the steatomata or atheromatous cysts, but the solid growths which consist of imperfectly developed gland-tissue." Such was Mr. Hulke's opinion.

For about ten days all seemed to go on well; the wound was healing, and the neck-glands were, according to my patient, in *statu quo*; and, though my hands and eyes began to dispute her evidence, my mind was only too glad to believe her. In a few days more it was useless to deny what was too plainly to be seen. The wound was not healthy, and the glands were larger and more painful. The disease then began in earnest to declare itself; day by day its progress could literally be *seen*; in three weeks more, the neck-glands had coalesced into one mass, and the unclosed wound became a hideous rodent ulcer. The whole circumference of the neck became involved, upwards to the occiput, downwards to the seventh cervical vertebra; in front, as low as the clavicles and as high as the jaw, with indications of yet further encroachments. The great vessels at the root of the neck were pressed upon, and œdema of the face and arms strangely altered the expression of the patient and incommoded her movements. It was curious to remark how the fasciæ of the neck determined the limits and mould of the tumour. The middle line in front was not invaded, and hence dyspnœa and dysphagia were not distressing, though the outline of the trachea was obliterated by the tension of the integument.

For the last three weeks of her existence, the disease did not increase in superficial extent. She sank exhausted, rather more than two months after the operation. No autopsy was obtained.

It may be that the tumour was non-malignant. That the glands were truly cancerous when I first saw her cannot now, I think, be doubted. It is possible that some obscure internal malignant disease was present, the coexistence of which with the tumour of the neck was purely accidental; that the primary obscure disease led to the gland-disease, which again led the wound to assume an unhealthy and ultimately a malignant aspect. I cannot say that I have much faith in my own theory.

Perhaps, there is no one cause which has had such a blighting influence upon the progress of scientific truth, as the vicious nomenclature which everywhere obtains, much of which has been handed down from the earliest times. Anatomy, physiology, and pathology, are smothered in a mass of uncouth, irrelevant, and false names. We are used to them; and use them without remembering that we promulgate an untruth every time we utter them. We forget how, as tyros, we were confounded and worried; how we were made to believe in impossible triangles, rotund squares, and angular circles; to use terms half Latin half Greek; or of which the etymology appears hopelessly hidden, or only to help the memory on the *lucus a non lucendo* principle. It is true, that many names appearing at first to express a meaning, might well, in process of time and progress of knowledge, come to be unmeaning or untrue; but there is no necessity to attach to words meanings based upon fancy or theory. Of late years there has been an improvement in this respect, *e.g.*, albuminuria or leucocythemia imply simply well-ascertained pathological facts, which no subsequent knowledge can controvert. On the other hand, gonorrhœa and cancer are both fantastic names, either having a false meaning or meaning nothing. Scirrhus is, I consider, an unexceptionable term; it indicates a leading feature, and is a "handy" word. The time is gone by for alteration; we might as well attempt to ostracise the English grammar as to forbid the word cancer—a fact that should be a warning to future nomenclators.

What constitutes malignancy? A scirrhus may assume the form of a hard, painless, indolent tumour; and, as such, it can hardly be considered malignant, although it may be said that every scirrhus contains the germ and essence of malignancy, and only waits an exciting cause; yet many a true benignant tumour does the same. An abstract definition of a benignant and a malignant mass is not difficult. While the former is composed of histological elements already taking a more or less important part of the animal economy, the elementary tissues of the latter are foreign to the body in a state of health; and, whereas the benignant tumour is at most a mass of normal, but misplaced or redundant tissue, the malignant tumour invades healthy structures, converts them into itself, and usurps their place; muscle, skin, and fat, remain so no longer, their distinctive characters disappear, changed by the active and deadly power of the all-absorbing cancer. Yet it does not appear, practically, that any one characteristic is sufficient to determine the question; the means at our command before removal are, of course, the most important, and, on the whole, perhaps, the most reliable; the previous history of the patient, the duration and rapidity of growth, the general appearance of the tumour and surrounding tissues, and the amount and character of pain, these are considerations with which every surgeon is familiar; yet one or more of these indications may be present and the tumour be benign, or absent and yet malignant. The growth of an adipose tumour is frequently most rapid; glands may enlarge from other causes than the absorption of carcinoma; pain is common to all diseases; and microscopic appearances may deceive the most practised eye.

It is not he who is most conversant with the literature of disease and modern theory who is best able to handle a tumour and decide its character, but he who is most familiar with the hospital ward, and possesses that which brains without practice cannot afford, the *tactus eruditus*.

Tunbridge Wells, May 1861.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

V.—Operations on the Eye.

[*Continued from page* 412.]

The Formation of Artificial Pupil. Case cccLxx. M., aged 68, came up to me many years ago with staphyloma of the right eye, and the left pupil was almost closed and blocked up with lymph from rheumatic iritis. The case looked so unfavourable, that I sent him home into the country, although he lived fifty miles away. He would not live contentedly in blindness, and after a time was brought up again, being still able to distinguish light from darkness. I agreed to operate, and made a free lower corneal section with a view to remove a portion of iris. Upon withdrawing the knife, a little pressure being probably made inadvertently at the same time, the adhesions of the iris to the capsule suddenly gave way, and he recovered his sight instantaneously. The eye was strong and well in a week, and he went home with excellent sight, and worked as a labourer for many years afterwards.

This was one of my earliest cases of operation for artificial pupil, and one of the most successful; for his lens had remained perfectly clear; and this patient's unexpected restoration to sight encouraged me to try many others whose cases seemed equally hopeless, and did not turn out so well. There is a very peculiar and indescribable change which takes place in the expression of the face when a blind man is suddenly restored to sight, which I have seen several times, but never more markedly than in this instance.

Case cccLxxi. M., aged 59, a Frenchman, who, by the advice of some relatives here, came over from Paris in search of a cure for his blindness. He had iritic adhesions, with central deposit, in each eye; and the pupil in the left was larger than in the right, but he had only the power of seeing light from darkness.

I operated on the right eye, and made a section in the outer and lower part of the cornea, passed in a hook as far as the margin of the pupil, drew the iris out at the wound, and cut it off. The anterior chamber filled with blood at once; but it was soon absorbed, and in less than a week his new pupil was quite clear, and he could see to tell the time by my watch.

Six months afterwards he came again, having a large clear pupil in the right eye, the central part of the capsule being still covered with lymph; but his sight was very good, and he begged me to operate on his left eye. This I did in the same way as before, and with the like success; and he went back to France able to read easily.

Case ccclxxii. M., aged 47, had lost the sight in the right eye since boyhood from an opaque cornea, to which the pupil had been adherent. The other eye having been recently damaged in the ironworks near Pontypool, by a spark of fire, he was disabled from work. I operated on the right, making a corneal section; and, as the iris prolapsed, I laid hold of it with a forceps, and removed it with the scissors. He saw well at once, and the eye recovered immediately.

Case ccclxxiii. M., aged 60, had been blind in both eyes for four years before I saw him. He could see the light with both eyes; and in both the pupils were closed, the central part of the capsule being occupied with lymph. The left iris was bulging forwards and discoloured; the right looked more healthy. I operated on the right eye, making a section in the lower and outer part of the cornea. The iris prolapsed slightly, and I removed a triangular portion with a forceps and scissors. He recovered from the operation without any bad symptoms, and had very good sight.

Case ccclxxiv. F., came under my care when a few weeks old. The right eye had sloughed from purulent ophthalmia; and the left cornea had given way below, the centre being opaque. From this most unfavourable condition the child so far recovered that it could see the light; but no pupil was visible, and the right eye was atrophied. When it was one year old, I operated on the left eye. The child was pinned up tolerably firmly in a towel, and the upper lid held with a speculum; and I made a section through the cornea, introduced a hook, and withdrew and cut off a piece of iris. The child showed no sign afterwards that anything had been done to it. The cornea was opaque for a time, but it cleared, and a pupil was visible; and she evidently could see objects, and recognise her mother's face.

This case is remarkable, because of the child's tender age for this operation.

Case ccclxxv. M., aged 50, had his right pupil closed by iritic adhesions and opaque capsule; and the left eye had met with a blow, which produced, in all probability, rupture of the eye; and the pupil had been distorted and drawn up completely under the upper lid. I removed some of the outer part of the iris through a corneal section, and he recovered with good sight. After a time he returned, to request me to operate upon the right eye, which was useless to him. I made a corneal section, and slit up the iris with a fine pair of scissors; and he did well. With a four-inch lens he could see well. In the other eye, the lens remained clear.

Case ccclxxvi. M., aged 15 months, with opacity of the right cornea, and adhesion between the left cornea and iris, involving the pupil—all following purulent ophthalmia.

I operated on the left eye, and made a section of the cornea, and applied pressure. The iris prolapsed, and I cut it off: a small quantity of vitreous humour escaped. He recovered at once, and had a fair sized pupil, reaching to the corneal section. The cornea was a little hazy, but was clearing when he was taken home. It was difficult to determine how much better the child could see, but everything was favourable for sight.

Case ccclxxvii. M., aged 30, a discharged soldier, who had lost his sight in India, probably from purulent ophthalmia, had his left eye amaurotic, with prominent cornea and central opacity. In the right eye, the pupil was closed, and drawn up to a cicatrix in the upper part of the cornea. I made a corneal section, and removed a portion of iris. The cornea was a little dull for a time where the section was made, but it cleared subsequently, and he had good sight.

Case ccclxxviii. M., aged 29, with entire opacity of the right cornea, and closed pupil in the left eye, following a mine-explosion. This was a very unpromising case. I operated on the left eye, and made a minute opening in the upper part of the iris, opposite the clearest part of the cornea. The eye filled with blood at once; but he said that during the operation he saw the bars of the window distinctly. The blood was gradually absorbed from the anterior chamber, and the left eye became much the best. I operated on the right eye (with prominent opaque cornea, a small portion below being alone clear), and made a small section, and drew out a portion of iris. He recovered well from this operation; and now, both eyes being equal, I made a further attempt on the right. I made a corneal section below with the left hand, drew out some iris, and cut it off. He went away in two weeks, with his sight much improved; but the cornea at the point of section was hazy. I saw him three months afterwards; and his cornea had partially cleared, and he could see to do labouring work.

Case ccclxxix. M., aged 30, had been blinded by gonorrhœal ophthalmia, which produced adhesion of the cornea and iris after sloughing of the cornea in each eye. He was unable to see to do anything. I operated on the left eye in which the sight was the least, and making a free section of the lower part of the cornea, drew out some of the iris with Tyrrell's hook. His anterior chamber filled with blood, and for a time he saw nothing. No bad symptoms followed. The cornea was partially opaque for a time, but it cleared, and he had a good pupil, nearly central, through which the sight was very good.

Case ccclxxx. M., aged 23, lost his eye by accident, and the sight of the left was useless to him in consequence of the secondary inflammation. His pupil was blocked up with lymph and adherent to the capsule. I made a corneal section in the left eye and tried to draw out some of the iris, but it tore easily, and the only instrument which would hold it was the cannula forceps. I withdrew some, and the anterior chamber filled with blood at once. The sight was not much improved by this operation, and three months after I repeated it, and succeeded in making a large clear pupil above, by the removal of the iris. His sight was much improved and when I saw him a year afterwards, it was still further improved, and with a four-inch lens he could see well. There was no history in this case which would account for the loss of the lens, for the accident had happened to the other eye.

Case ccclxxxi. M. aged 35. This case was like the last, viz., injury destroying the right eye and consecutive inflammation of the interior of the left eye, rendering it useless by closed pupil and deposit of lymph. I made a free lower corneal section, drew out some iris, and snipped it off as far as the pupil. Blood escaped at once, but after its absorption he saw well. He had no bad symptoms.

Case ccclxxxii. M. aged 60. An old man, who has gone through many vicissitudes,* came to me many years ago with incipient cataract in the left eye. I lost sight of him for some years, when he reappeared and I proposed to operate on his left eye in which the cataract was formed, while he had a moderate amount of sight in the right eye. He was persuaded to go to London and had the lens extracted at the Moorfields Hospital, and then he returned to me with opaque capsule blocking up a very small pupil. I made a lower corneal section, and not being able to dislodge the capsule I took off a piece of iris and left a black clear pupil through which he had good sight.

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* Should the surgeon who operated on this patient at Moorfields happen to read this account, he will possibly recognise his patient by the following history. At my second interview with him, on asking him for his dispensary-card, he told me his pocket was picked of it as he was crossing the Prairie to go to the Salt Lake; Being converted from the errors of Mormonism, he escaped, and now makes a good living by selling an account of the sect and of his own escape. He also lectures on the subject. He left his wife behind him in Wales.

Case ccclxxxiii. M. aged 19. His left eye was partly staphylomatous, the right cornea very opaque. With some difficulty I removed a portion of the iris of the right eye through a corneal section, and he had much intolerance of light for a day or two, but afterwards his sight was a good deal improved.

Case ccclxxxiv. M., aged 45, had only one eye, and in it the cornea was dull that he could not find his way about. Standing in front of him, with the left hand, I made a lower section of the cornea, and as the iris prolapsed I cut it off with a forceps and scissors. He went away in a few days with improved sight.

Case ccclxxxv. M., aged 36, injured his left eye when twenty years of age, and the result was a closed pupil. The other eye became very dull from iritis about four months before I saw him, Upon operating, and removing a portion of the iris through a corneal section, a large black pupil was formed, but a considerable quantity of fluid vitreous humour escaped. The next day his eye was strong, and he said that he could see fairly.

Case ccclxxxvi. F., aged 40, with the left eye staphylomatous, and a large corneal opacity and iritic adhesion in the right. The greater part of the cornea was opaque. I made an upper section, and removed a part of the iris by Tyrrell's hook. In two days the eye seemed to be recovered from the operation, and she went home with improved sight.

Case ccclxxxvii. M., aged 30, had a sightless left eye, and in the right he had suffered from a perforating ulcer of the cornea, and very little anterior chamber was left. I operated and withdrew, through a lower corneal section, a small portion of iris, and snipped it off. He went home with his sight much improved, but very weak.

Case ccclxxxviii. M., aged 15, was able to find his way about with the right eye, on the cornea of which was a considereble opacity. In the other eye he must have had a perforating ulcer, for besides the opacity there was anterior adhesion of the iris. I operated on the left (his worst) eye, and by a corneal section, was enabled to draw out some iris and remove it. The next day the cornea was opaque opposite the new pupil, and he had but little sight. It began to clear in a few days and he went home.

Case ccclxxxix. M. aged 40. The right eye had been lost by a puncture with a thorn, and the pupil was filled with lymph, the iris being in contact with the cornea. In the left eye inflammation had come on, and the centre of his cornea had become opaque. I made a small pupil in the left eye, without difficulty by a corneal section and the removal of the prolapsing iris. He had no bad symptoms following, and went away with improved, but still imperfect sight.

Case cccxc. F,, aged 20, injured her right eye with a penknife when six years of age, and six months before I saw her internal inflammation and iritis had destroyed the sight of the other. The right pupil was closed, the cornea was opaque below, and she squinted with this eye. I removed a piece of iris by repeatedly laying hold of it by a fine forceps through an incision in the cornea. She was a little improved by this operation, and when I saw her after three months, I divided the internal rectus, and cured her squint, and her sight was still further improved. On a third occasion, I attempted to enlarge the pupil still further, but as the vitreous humour began to flow I desisted, and in this case the sight although improved was imperfect.

Case cccxci. M., aged 18, lost his right eye some years before I saw him, from a blow which destroyed it, and the eye was sunken. In his left eye the pupil was blocked up by lymph, but he could see to do some kind of work and to get about. I removed a piece of iris and his eye soon recovered itself, and although improved his sight was indistinct.

Of the remaining cases where the operation of artificial pupil was performed, the first few are incomplete, and in most of the others, although a pupil was made in a satisfactory manner the patient was unable to see in consequence of some other defect of the eye.

Case cccxcii. M., aged 62, with closed pupils after iritis. I operated on the right eye and removed some of the lower and outer part of the iris through a corneal section, and the anterior chamber filled with blood. No inflammatory symptoms followed, but he went away before the blood was all absorbed.

Case cccxciii. M. aged 23. The right eye was sunk and the left had been ruptured, and was soft. It was a most unpromising case. I made a pupil in the left eye, but his sight was no better.

Case cccxciv. M. The right pupil was closed by adhesion and opaque capsule, and he suffered from *nyctalopia* of the left. I made a pupil in the right eye, with some difficulty, owing to his unsteadiness. The anterior chamber filled with blood, and he saw no better.

Case cccxcv. M., aged 20, had been blind since he was nine months old from smallpox. The left eye was sunk; and in the right there was closed pupil with adhesion of the cornea to the iris. I made a pupil in the outer part of the right eye, opposite the point where the cornea was clearest. He recovered with a bright black pupil, but his sight was not restored in a corresponding degree.

Case cccxcvi. F., aged 70, with amaurosis of the right eye, and the left pupil closed and filled with whitish lymph. I made a pupil of fair size in the lower part of the iris, and she went home in four days with directions to come up and have the cataract extracted; for an opaque lens was seen through the new pupil. I never saw her again.

Case cccxcvii. F., aged 35, with the left eye sunk, and the right pupil blocked up with lymph. I made a pupil in the right iris, and she went home seeing more light. Three months afterwards I operated again, and removed a little more iris, but with some difficulty, as it appeared that the whole posterior surface of the membrane was adherent to the capsule. An increased quantity of light was then admitted. A third operation and a fourth were performed, but with no ultimate success.

Case cccxcviii. M., aged 50, with a pupil in his right eye blocked up by adherent, particoloured capsule. The other eye was lost ten years before, and he had already undergone several operations to try to regain his sight. The case was most unpromising. I removed a portion of iris with some difficulty, for fluid and pellucid vitreous humour streamed from his eye. He saw the light more strongly afterwards, but received no permanent benefit.

Case cccxcix. M., aged 45, with tremulous iris and no sight in the right eye; in the left the pupil is drawn down to the lower part of the cornea where it is adherent and filled by some opaque matter. I made a corneal section, and with the point of the curette turned out a small oval hard cretaceous lens, leaving a clear pupil. He saw but little better at first; but six months afterwards he wrote to say that he was much better. I saw him about eighteen months after the operation, and then he could see but little better than before.*

Case cccc. M., aged 50, lost his left eye some years before I saw him by an accident, and in the year 1849 (six months after the original injury) the sight in the right eye began to fail. He had been previously operated on by one of my colleagues, without success. The pupil was blocked up with lymph, the eye soft, and the iris green when I saw him. I made a corneal section, and some *brown aqueous humour ran down his cheek, and his iris, which had been green, at once became yellow blue.* I succeeded in making a pupil, but his sight was no better.

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* This case should have been arranged in the list of operations for the removal of opaque capsule, but was accidentally omitted.

In most of these cases of discolored iris in diseased eyes, I believe that the green hue depends upon this alteration in the humours, and not in the membrane itself; and this particular instance seems to illustrate some remarks I made upon discoloured iris in connection with Case No. 337.

Case ccccI. F., aged 55, lost his sight by internal inflammation, and both pupils were obliterated, the left being staphylomatous. I operated on the right eye, and making a lower section removed a part of the iris, leaving a new pupil blocked up with an opaque lens. At a second operation I removed a portion of the lens, but with some difficulty, for she was struggling and screaming continually, and the nucleus remained behind. This came out after a time, but her sight was no better; and after I had made a new pupil without any advantage, the case was given up, and she is now hopelessly blind.

Case ccccII. M., aged 15, lost one eye by accident, and the other was useless from sympathetic inflammation, the pupil being closed. I performed two or three operations with a view to make a clear pupil in the left eye, but without any success; and his eyes atrophied.

Case ccccIII. F., aged 19, with staphyloma of the right eye; and closed pupil, adherent cornea, and iris in the left, from smallpox. I removed a portion of the iris from the left eye, and made a pupil opposite the clear part of the cornea. When the eye recovered and all the blood was absorbed, she could see objects better.

Case ccccIV. F. aged 16. The left eye was sunk; and the right had closed pupil and corneal opacities following the measles. I operated in the same way as in the last case, but only a little improvement followed.

Case ccccV. F., aged 21, with eyes exactly in the same state as those described in No. 403; viz., staphyloma of one, and closed pupil of the other with corneal opacity, following smallpox. I operated in the same way and made a pupil, but she saw no better.

These three last cases were inmates of the Bristol Blind Asylum, and being there under my care, I thought it right to let them have a chance of restoration of sight, although the hope was but slight.

Case ccccVI. M., aged 66, an old rheumatic subject with closed pupils, adherent irides, and lymph in the centre. I made a large pupil in the left eye, and for some days was in doubt whether he had cataract or not. Having at last decided that he had, I extracted it through the new pupil; but his retina was unsound, and he saw no better.

Case ccccVII. M., aged 25, a labouring man whose right eye had become entirely opaque, and the left pupil was closed with adherent iris and capsule and fibrinous deposit in the centre. I took out a piece of iris from the left eye, and it was discovered that he had an opaque lens behind. This I extracted at a subsequent operation, but with some difficulty; for the eye was very moveable, and the black pigment of the piece of iris, which had been removed on a previous occasion, still adhered to the capsule and complicated the operation. A hard opaque amber lens was ultimately removed. This patient went on well for a time, but ultimately inflammation came on and he went home. I have heard casually, lately, that he is getting better, but I can give no reliable account of him.

In addition to the above, I operated upon a man with conical cornea, as long ago as January 1852, and drew his pupil down to the outer and lower part of the cornea, so as to alter its form, and bring it opposite to a flatter part of the eye. He was well from the operation in a day or two, and the pupil was all that was desired, but his sight was not improved by it. I noted at the time that the eye appeared a little less conical after the operation.

[*To be continued.*]

DR. BEALE'S LECTURES

ON THE

STRUCTURE AND GROWTH OF THE TISSUES OF THE HUMAN BODY.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, 1861.

In his fourth lecture, Dr. Beale commenced by recapitulating his previous observations on the characters of *germinal matter* and *formed material*, and on the means of distinguishing them from each other. The lecturer then considered briefly some very interesting changes, which may be shown to occur in elementary parts, when the conditions, under which growth takes place in a normal state, are modified.

Prep. No. 20 showed the elementary parts situated in the middle of the cuticle of the arm, about twelve hours after the application of a blister, at the time when the superficial layers were being separated from the deeper ones, and fluid was accumulating in the interval between them. Several elementary parts were seen invested with a moderately thick layer of formed material, but some had but a very thin layer indeed. Several spherical masses of germinal matter were observed in close contact with the inner surface of the softened external substance, and these were evidently in a state of active growth. They seemed to be growing through the formed material. They were multiplying in number. If set free, and nutrient material continued to be abundant, they would soon increase in size, and multiply very fast. The layer of formed material investing each would be exceedingly thin. The masses first resulting from the growth of the germinal matter set free from the epithelial particles would be invested with a layer of formed material, and would resemble a young cell of cuticle, but as they multiplied faster and faster, there would not be time for the formation of the layer of *formed* material, and at last corpuscles resembling pus would result.

This last stage was seen in No. 21, which was obtained from the same blister twenty-four hours after it had risen.

These specimens showed the manner in which the formed material was produced, and how, under certain altered conditions, the germinal matter might increase quickly, and a vast number of separate masses might be rapidly produced. The preparations also proved that the thickness of the layer of formed material (cell-wall) was determined by the rapidity of increase of the germinal matter, which, in great measure, depended upon the proportion of nutrient matter present.

If the germinal matter of a structure grows unusually quickly, particles resembling the pus-corpuscles, which contain very little formed material, are produced. Conditions favourable to the increase of germinal matter are adverse to the formation of formed material. The formation of pus from epithelial and other cells has been demonstrated by Virchow, who, however, attaches the greatest importance to the formation of pus in the areolar tissue corpuscles; and considers that from these bodies various morbid processes start.

Dr. Beale thought that the first stage was the more rapid multiplication of the elementary parts, and the formation of a diminished quantity of formed material—the *tendency* being towards the production of similar elementary parts, but this being prevented by the abundance of nutrient material, and the rapid increase of the germinal matter. There can be no doubt that germinal matter may even grow and multiply, so to say, at the expense of its own formed material.

Virchow considers that two different modes of pus-formation must be distinguished, according as the pus proceeds from epithelium or from connective tissue. "Whether there are also forms of suppuration, proceeding from tissues of the third class, muscles, nerves, vessels, etc., is at least doubtful; because of course the elements of connective tissue which enter into the composition of the larger vessels, the muscles, and the nerves, must be eliminated from the really muscular, nervous, and vascular (capillary) elements. With this reservation, we can for the present only maintain the possibility of two modes of pus-formation." Neither does Virchow appear to have recognised the tendency of the germinal matter of tissues—the cornea, for instance—to form, under certain conditions, soft fibres, which are produced more rapidly than the perfectly normal structures—this tendency, diminishing as the rapidity of multiplication increases, until at last pus is produced.

Pus is not a special new formation always produced from the same substance, but it results from many different tissues, and its characters may be modified to some extent, according to the nature of the tissue and the exact conditions under which it grows.

Dr. Beale believes that the living germinal matter of an elementary part may be set free by the destruction of the formed material, as in a scratch, perforation by the sting of an insect, or other mechanical injury, or by softening of the formed material, caused by an alteration occurring in the composition of the fluid which bathes it, or induced artificially by various chemical compounds. When germinal matter comes into contact with nutrient material under favourable circumstances its power of infinite multiplication becomes apparent. Inanimate matter near it is absorbed by the several particles, altered, and becomes living. If the nutrient matter be very abundant, the particles will consist almost entirely of germinal matter; but if not very abundant, time will be allowed for the formation of a certain amount of formed material. The germinal matter of any tissue in the body is capable of growing in this way. Every particle of germinal matter possesses the power of infinite growth. Whether a texture with a smaller quantity of formed material than in the normal tissue, and hence a soft spongy tissue, or a mass composed almost entirely of small spherical masses of germinal matter (pus-corpuscles) is to be produced, will depend upon several different circumstances. If we look at suppuration in this light, the cause of the different characters of pus becomes evident. The germinal matter of any tissue in the body may grow infinitely. In the normal state it multiplies under certain restrictions, and as it grows, the formation of formed material gradually proceeds, and the germinal matter becomes separated further and further from the nutrient fluid. The formed material is prevented from undergoing any but slow change; and the removal of the small quantity of products resulting from this change is sufficiently provided for. But if the germinal matter be set free, active changes immediately commence, the inanimate nutrient matter around is soon taken up and becomes living, and the process will continue as long as the above conditions last. And if this were not the case, what would happen? Why, clearly the fluids set free, prevented from undergoing the incessant change which is provided for in the normal state, would rapidly putrefy, and the products resulting from the putrefactive changes would soon cause the death of the tissues immediately surrounding. The process would go on, and a considerable quantity of tissue would be destroyed, and the death of the whole organism would result. In *gangrene*, the germinal matter is killed; in *suppuration* it grows freely; and if this process did not occur, there are cases in which the death of the tissues must result.

At the high temperature of the higher vertebrate animals, moist organic matter, in which the fluid is not perpetually changed, rapidly putrefies; but in the lower cold-blooded animals the putrefactive change occurs very much more slowly, and hence there is not the same necessity for the rapid conversion of the dead tissue into living germinal matter. In them, the process which we know as suppuration does not take place, but the changes although they are the same in their essential nature, do not go to the same extent. Dr. Beale had specimens of the growing elementary parts of the cuticle of the frog, after injury, which corresponded exactly with those from the human skin which were shown in the last lecture.

No. 22 was a preparation of pus, several corpuscles of which had been well-coloured by carmine. All fresh pus corpuscles were capable of being coloured.

This specimen should be compared with No. 23, which was a preparation showing the elementary parts of a rapidly growing fungus, which reached the size of a small pear in a single night. It was difficult to see any membrane of formed material surrounding each mass of germinal matter. The rapid increase of such a structure was marvellous, but it could not live long, because there was no provision for the equable distribution of nutriment to all parts, or for removing the substances resulting from the death of the particles of germinal matter. The consequence was, that the entire structure, having reached a certain size, very soon died.

From the examination of the above specimens, it appeared that the germinal matter of elementary parts growing under certain conditions different from those existing generally, would, if pabulum be abundant, multiply very freely. A number of masses would result, each of which was capable of producing new ones by division, but only a very thin layer of formed material investing each would be produced, or it might not be possible to demonstrate an investing membrane at all. On the other hand, masses of germinal matter which, in the normal state, multiplied very rapidly, and were therefore not surrounded by formed material, might produce it, if placed under circumstances not favourable to their free increase. The white blood-corpuscle, in a state of rest, and freely supplied with nutrient matter, might even form weak fibres. In coagula of fibrine, Dr. Beale had seen white corpuscles from the surfaces of which fibres of considerable length projected, and he could see no reason for doubting that the relation of these fibrous material to the germinal matter was the same as in other structures. He had seen white blood-corpuscles entangled in the coagulated transparent matter of the casts of the uriniferous tube, undergoing multiplication, and in the same case he found between the capillary loops and the membranous capsule of the Malpighian body, some long soft fibres, with a body in the centre exactly resembling a white blood-corpuscle. White blood-corpuscles had accumulated considerably in the capillaries in every part of the kidney in this case.

In very recent lymph effused on the surface of serous membrane are masses of germinal matter, many of which are connected with the soft recently formed fibres. Dr. Beale believed that the fibres in this recent lymph consisted of the formed material of the so-called corpuscles. He was still making observations on this matter, especially with reference to the question, how far a similar view might account for the formation of fibrine under ordinary circumstances. He believed that fibrine is the formed material of the white corpuscles, lymph, and chyle corpuscles. In false membranes of very recent formation, he had demonstrated the existence of numerous masses of germinal matter, in connection with the fibres and in the specimens which he had examined. He felt sure that the fibres consisted of the formed material of these masses of germinal matter, and that they bore to the corpuscles or masses of germinal matter, the same relation as the formed material of the different tissues. So that germinal matter may multiply very fast, and produce less formed material than in the normal state; or germinal matter, which in the normal condition produces very little formed material, may be placed under circumstances in which a considerable quantity of formed material is produced. It is therefore very essential to study the conditions which cause these very striking modifications in the germinal matter of different structures.

No. 24 showed the relation existing between the germinal matter and formed material of the tendon of a child at birth, and in No. 25 the germinal matter and the formed material of the true skin from a fœtus at the seventh month were seen.

The first was a structure, in which the changes were exceedingly slow; the second was one in which changes were occurring constantly, and with comparative rapidity throughout life. In all probability the germinal matter, in the one preparation, corresponds to that in the other,—fibrous tissue being the result of the growth of the germinal matter of the tendon—nerves, capillaries, fibrous, elastic, and adipose tissues being formed from the particles of the germinal matter in the last specimen. The relation of the germinal matter to the formed material, in quick and slow growing tissues, is well seen in the fœtus, from the sixth to the ninth month.

No. 26 showed the bulbs of two or three hairs from the foot of a kitten. The bulb was much wider than the shaft of the hair. The elementary parts, in this region, were composed almost entirely of germinal matter. Higher up the formed material increased, and each elementary part underwent condensation. Much of the water of the elementary parts was absorbed, and the whole, consequently, contracted and became firmer. The manner in which the formed material was produced was seen very beautifully by examining the elementary parts at different heights in a specimen of hair prepared with carmine. According to the language generally employed, the nucleus gradually diminished while the cell increased in extent, as we ascended from the deep part of the bulb, upwards towards the shaft, until, when we arrive at the dry part of the hair, the cells (cortex) were destitute of nuclei. The nature of the change was explained very simply by the view which Dr. Beale advocated, and followed of necessity, because the supply of nutrient material to the elementary parts gradually diminished from below upwards.

No. 27 was a thin section from a tumour which grew very rapidly. It appeared at the lower angle of the scapula of a boy, aged 12 years, and when first noticed was about the size of a bantam's egg. In six months it measured twenty-seven inches in circumference. It was firm and hard, and was intimately adherent to the scapula. The case occurred in the practice of Dr. Elin, of Hertford. The friends would not consent to have the mass removed, and it continued to grow for about twelve months after its first appearance, when hæmorrhage occurred from some large veins on the surface of the tumour, and the boy died of exhaustion.

No. 28 was a section of tumour, about the size of a walnut, connected with the parotid gland. The remains of some of the gland-follicles were seen, and as the elementary parts in them were dead, and were undergoing disintegration, they were not coloured by carmine. On the other hand, the actively growing tissue contained a large amount of germinal matter, every separate mass of which was darkly coloured. The growing tissue insinuated itself in every direction and where the parts of the growth first formed, were becoming old and were losing their vital activity, offsets from the more recently developed parts, might be seen invading them.

No. 29 was an interesting specimen of the so-called cancer-cells, which were passed in the urine from a case of cancer of the uterus.

In these morbid growths there was no difficulty in demonstrating the existence of germinal matter and formed material, and even cursory observations of the tissue afforded abundant evidence of the wonderful power of rapid growth. Although it would not be possible to distinguish a single elementary part of one of these growths from an elementary part removed from certain healthy tissues, the striking irregularity of the structure, the absence of that orderly arrangement exhibited by all healthy textures, and the great extent of tissue exhibiting precisely the same characters, afforded conclusive evidence as to the nature of the structures under consideration.

If the elementary parts of a tissue multiplied to an unusual extent, and thus overstepped the limits assigned to them in the normal state, a growth was produced which might only differ from the healthy tissue with respect to its bulk, with reference to the position which it occupied or to which it might spread, and in the relation it bore to other textures. Adipose tissue, fibrous tissue, cartilaginous and bony tissues often formed tumours of considerable size in direct continuity with the normal structure. It would seem that just at the point where these outgrowths originated, the restrictions under which growth occurred normally, were to some extent removed, and here the power of unlimited growth, which was a property of the germinal matter of all tissues, was seen manifesting itself.

Abstract

OF

REMARKS ON MEDICINES.

By HENRY KENNEDY, M.D.

[THE following is an abstract of a paper by Dr. H. Kennedy, published in the *Dublin Medical Press.*]

The tendency of the day is so strong to give as little medicine as possible, that I am convinced the doses are frequently too small, and of necessity inert. This strikes me as being a very common error, and, unless corrected, must tend to lower the status of medicine. It is now some years since a patient, labouring under dysuria without any organic disease, was taking benzoic acid, but without any beneficial effect. The dose was five grains three times a day. It was suggested to double the dose; and the result was, after some days, a perfect cure. It is worth noting of this medicine, that its good effects are not confined to functional disease. I have now had different instances where the dysuria was in connexion with malignant disease of the uterus; and yet where this very distressing symptom, as it often is, was relieved in a marked way by this medicine.

Where too small a dose of a particular medicine is given, it is, I have reason to think, one of the causes why medicines are found to fail. On no other principle can I explain the opinion which Mr. Syme of Edinburgh has lately given of the effects of sarsaparilla. He has said you might as well give as much hay-water; and others, I believe, have given a similar opinion. How this has arisen I am quite at a loss to conceive, except the explanation given above; for in doses of a pint daily of the decoction, I continue to find its efficacy most marked, and I use it now with as great a certainty of its good effects as the nature of the subject admits. Neither can I forget, which does not seem to be generally known, that it was tested long since by rigid experiment, and proved eminently useful.

With regard to colchicum, it is really curious to hear the variety of opinion held. By some it is looked upon with the greatest dread; whilst a few do not use it at all, or in doses so small as to be entirely useless. Now, I do not say that discretion is not to be exercised in its use. I know there are a few constitutions will not bear it at all, and some in but the smallest doses. But I also know that, in many instances, it may be given in very large doses, by gradually increasing them; and with very marked advantage. In this way it may be used in some forms of bronchitis, and still more strikingly in certain cases of dropsical effusion, which I have succeeded in removing at least for the time. In one of these instances, the medicine was given to the amount of three drachms in the day, without any other effect than the removal of the effusions, which were most extensive.

The last medicine I shall notice here is the dilute nitric acid of the *Dublin Pharmacopœia*, to which my attention was drawn several years back by reading of its successful use in a case of morbid thirst. Very shortly after, a case of the kind came under my care. The patient, who was a medical practitioner, had laboured under it for the long period of thirty years; and I need scarcely add, his general health was anything but good. The acid, given in doses of a drachm in the day, cured him literally in eleven days. Such a result was very unexpected, and naturally caught my attention; and ever since I have used the acid with very marked advantage in similar cases. I know not whether others have met as many of these cases as have fallen to my lot; but this I may state, that they appear to me very common and very serious. It is not, however, of cases of morbid thirst that I would now speak, but of the doses of the acid which were given, and with relief. I always began with one in the day, and increased it to two and even three drachms; and in one instance the patient, a man of fifty years of age, literally took, for some days, as much as five drachms daily. This patient I was obliged to turn out of the hospital for bad conduct, so I lost sight of him. From what I observed, however, of the effects of the acid in this and many other cases, I can have no hesitation in saying that at least some of the most valuable of the therapeutic actions of this medicine are yet to be learned; and that, when the time comes that something of a systematic treatment is known for that terrible disease diabetes mellitus, this acid will constitute a part of that treatment, being capable of lessening the thirst, as I have seen in different instances. I am at a loss to explain here a statement very lately made in the *Lancet* about giving the tincture of digitalis in half-ounce doses in cases of delirium tremens. It would appear to myself to be a very hazardous proceeding, and I see others have now made a similar remark.

A second cause why medicines fail is their adulteration. But on this point it is unnecessary to dwell, as it is so well known.

A third reason for the failure of medicines is the introduction of new ones into practice. When a new medicine is added, how common it is to hear it spoken of as if it would never fail, and was to supersede all others of its class! But I do say that the more we increase their number, the greater will be the tendency to prevent our improvement in therapeutics; and I believe that a complete knowledge of some half-dozen of really useful medicines advances the art infinitely more than if, in place of six, we tried our hands on sixty agents; for it is not possible, as it appears to me, even in the largest institutions and with the most extended opportunities, for any one individual to carry out a series of observations which will be absolutely trustworthy, unless they be confined to a very limited number of agents.

In making such experiments, it would seem scarcely necessary to speak of the need which exists for ordering medicines *per se;* and yet it is curious to observe how often this rule is broken. It has frequently happened to me to hear of special medicines being of use in special diseases; but, on further inquiry, it turned out that two or three agents were being used at the same time. Some time back, a work made its appearance in which iron was praised as a cure-all for erysipelas. On looking into the work, I found that the preparation recommended was the tincture of muriate of iron, as it is commonly called. Now this may be a very effectual remedy for the disease; but it certainly is not correct to speak of the iron alone as being the agent of use, inasmuch as I have found the muriatic acid by itself a very valuable agent in certain forms of fever, and have used it largely in this way.

The last reason I would notice as causing the failure of medicines is the mode in which they are given. Any one familiar with the writers of the last century must have observed that there is at least one striking difference in the way they gave medicines, as contrasted with the present day. Such medicines as could be used in powder were very generally so given. Now, I have no hesitation in saying that, of the different ways in which a medicine may be administered, this way is by far the most likely to prove efficacious. The medicine is given in the simplest form, and is consequently much less likely to be in any way injured by preparation. The processes put in force to give medicines a different form, such as infusions, decoctions, tinctures, and extracts, are all more or less capable of altering—to say the least of it—the effects of the entire class taken from the vegetable kingdom. It is for this reason that the conviction is strong on my mind that the physicians of the last century were more successful in the treatment of disease than those of the present day. Many of their medicines were given in a more effective form, and the result was in proportion. Acting on this idea, I have long been in the habit of ordering medicines in the form of powder; and each succeeding year has only the more strongly satisfied me of the efficacy of the plan. As examples of medicines so used, I may instance colombo, cinchona bark, uva ursi, and others; in fact, whenever I can get the medicine in powder, I prefer it. That there are objections to this mode of using them I admit. To many it is an unpleasant way of taking them, and it occasionally occurs that the other preparations of a medicine will be borne when the powder will not. But these are exceptional cases, and scarcely affect the general principle. Last winter I had the honour of reading a paper chiefly on the use of uva ursi in cases of phthisis; and I then spoke particularly of giving the medicine in the form of powder; that in this way I had found it very efficacious; and that, being a cheap medicine, it could be continued with the poorer classes for a long period—a matter of considerable moment in the management of such a disease. I would just observe of it here, that I still continue to find it a valuable medicine, and that in by far the majority of cases I use it in the form of powder.

To recapitulate:

1. To ensure the full effects of any medicines, they must be given in larger doses than is at present done.
2. As examples of this principle, sarsaparilla, benzoic acid, the dilute nitric acid, and the preparations of colchicum, may be mentioned.
3. The adulteration of medicines, or the substitute of cheaper articles, is a common cause of their failure.
4. The introduction of new medicines or preparations into practice tends to increase the difficulties of therapeutics, by enlarging the field for observation.
5. In testing the effects of medicines, every care should be taken that the experiment is an exact one; and, when possible, the medicine should be given *per se*.
6. When the nature of the substance admits of it, there are good grounds for believing the form of powder is the most efficacious in which it can be administered.

What Becomes of all the Opium? One of the curious facts revealed by the publication of custom-house tables is, that there was imported into America last year 300,000 pounds of opium. Of this amount it is estimated, from reliable data, that not more than one-tenth is used for medical purposes. The habit of eating opium is known to be spreading rapidly among lawyers, physicians, clergymen, and literary men, and enormous quantities are used in the manufacture of those poisonous liquids which are dealt out in drinks in the saloons and groceries that infest every city and village in the country. (*Med. and Sur. Rep.*)

Reviews and Notices.

Essays and Observations on Natural History, Anatomy, Physiology, Psychology, and Geology. By John Hunter, F.R.S., being his Posthumous Papers on those Subjects, arranged and revised, with Notes: to which are added, the Introductory Lectures on the Hunterian Collection of Fossil Remains, delivered in the Theatre of the Royal College of Surgeons of England. By Richard Owen, F.R.S., D.C.L. Vol. i, pp. 403. London: 1861.

[*Continued from page* 496.]

The next section of the book—the Observations on Physiology—commences with a record of the author's thoughts on the nature of life and the living principle. To say, however, that we have here an exposition of this most difficult subject, or even such a statement as to enable us to understand clearly what meaning Hunter himself attached to the terms, would be to assign to his remarks a character which (without the least depreciation of his name) they do not possess. All that the deep-thinking and laborious physiologist has here written, simply leaves us as much in the dark as ever, and shews still more forcibly how difficult the subject is, when even his vast intellect failed in its elucidation.

Hunter begins by comparing life to a fire, or something similar, which he proposes to designate "animal fire". He then says:—

> "Like common fire, it wants a constant supply, without which it would be extinguished; and, like common fire, it seems to be set loose in the lungs, so as to be fitted for animal life, before it sets out on its great office; and this letting loose of the animal fire seems to depend upon the air, as much and in the same manner as common fire. So that, instead of something vivifying being taken from the air, the air carries off that principle which encloses and retains this animal fire. I do not mean real and actual fire; but something that is similar, and is effected and brought about much in the same manner. And by understanding the one we are led, in some measure, to the knowledge of the other; so that the aliment we take in has, in a fixed state, the real life; and this does not become active until it has got into the lungs; for there it is freed from its poison." (P. 113.)

If we were to form any definite idea from these words, it would be: that the act of respiration, by removing something, sets free the life—the "animal fire". Yet, a few pages further on, we find Hunter apparently questioning his own conclusions, and asking:—

> "What proof is there that respiration continues life throughout the body? and how come the amphibia to have so great powers of life with so little respiration? Whatever the effects of respiration are, such effects should keep pace with the cause."

In his further observations, Hunter speaks both of the "living principle", and of "simple life". The editor of the work appears to have been somewhat misled by a case related by Hunter of paralysis of motion with wasting, and adduced by him as an instance of loss of simple life, when he adds a note to the effect that this "simple life" of Hunter seems synonymous with the "irritability" of Haller. So it evidently does, in part: but then Hunter speaks both of the living principle (evidently synonomous with vegetative life) and of simple life, as being of longest duration in the animals of lowest organisation, and of simple life as being much stronger in vegetables than in animals.

To attempt to formulate Hunter's opinion on the nature and origin of life, would be probably to write down a series of negative propositions. With one such negative proposition, we leave the subject; the passage, Mr. Owen suggests, "may serve to throw light on the often mooted question of Hunter's real opinions on it."

> "Whatever Life is, it most certainly does not depend upon structure or organisation. In contradiction to organisation being a cause, we find in general that the least organised are the most tenacious of life. Thus we find that, in general, the most imperfect animals are the most difficult to be killed, when the action of the parts is stopped upon which life is continued. But this is not constantly so; therefore peculiarity of organisation is not in the least necessary." (P. 114.)

In the notes on Respiration, we meet with, *inter alia*, a suggestion as to the connexion of the act with animal heat. Hunter asks whether there is not reason to believe that one purpose of respiration is to produce a chemical change in the blood; because expired air (he says) is loaded with fixed air or aërial acid (carbonic acid); and this has been proved to be a compound of carbon and vital air (oxygen). "It would appear as if charcoal" (carbon) "were an excrementitious part of the blood separated by combining with vital air." He did not, however, regard the pulmonic respiration as the sole source of animal heat; nor did he hold with the doctrine of Stevens, that the heat is due absolutely to the combinations going on in every part of the body. He rather attributes animal heat to a triple source—"the chyliferous fermentation in the stomach, the sanguiferous in the lungs, and [the molecular in] the vessels of the body."

In reading the observations of Hunter on Respiration and Circulation, we at once notice that he clearly perceived the intimate connection of these two functions, and their corresponding modifications in the different classes of animals. His idea of respiration was, the action of air on the blood in such a manner as to support life—no matter whether this were effected in a special organ, or on any or every part of an animal. His exposition of the circumstances calling for the presence of a special respiratory apparatus, is very clear. He says:—

> "Without a collecting and a motion of the nutritive juice, I can conceive there can be no respiratory organ; for I find that the different circulations in the different orders of animals, as far as I know, are so connected with different kinds of lungs, as for either system not to be intelligible alone. For, first, the different circulations cannot be described without including the respiratory apparatus, as this makes a portion of the circulation; nor will the mere structure of the lungs in different animals explain their full purposes; and as their whole use is upon the blood, and they are thus connected with the circulation, it is impossible to understand the one without the other; and this so much so as to make it difficult to say which ought to be described first.
>
> "In animals where there is no circulation there can be no lungs; for lungs are an apparatus for the air and blood to meet, and can only accord with motion of blood in vessels. But where there is no circulation, yet we must suppose from analogy that the air affects the juices that are to carry a continuance of life and support to all the parts of the body." (P. 122.)

In his remarks on the Circulation, Hunter enlarges on a classification of animals according to the number of cavities in the heart. He thus divides animals into *tetracoilia*, or those with two ventricles and two auricles; *tricoilia*, or those with one ventricle and two auricles; *dicoilia*, where there are two cavities; and *monocoilia*, where there is but one cavity.

In speaking of the *tricoilia*, Hunter gives an excellent illustration of the gradations which are to be observed as existing between one class and another. Taking the chelonia as the type of the order, he describes two auricles and a single ventricle, from which proceed two aortic arches uniting behind in a manner, he observes, resembling in some degree the union of the two arteries proceeding from the gills in fish. For this formation and union of *two* aortic trunks in the lung-breathing reptiles he cannot suggest a use, and is inclined to think that "they were only provided to lay the foundation of an analogy with the animals of the immediately inferior class—the *pneumobranchiata*—and of the class below them —the fish."

He then goes on to point out how, between the true lung-breathing *tricoilia* and the gill-breathing *dicoilia*, or fish, there is no abrupt transition. In fact, he seems disposed to give a distinct place to the animals of the intermediate form, under the name (already referred to) of *pneumobranchiata*, or animals possessing both lungs and gills. In thus hinting at the propriety of separating certain of the *reptilia*, Hunter plainly anticipated much of the suggestions which have been made by naturalists in later years. He sums up the gradations in the following sentence:—

> "Thus the gradation is formed from perfect lungs, first to perfect lungs and imperfect gills, then to perfect lungs and perfect gills, till at last we have no lungs, but simply perfect gills, as in the fish." (P. 131.)

Passing by the sections on Digestion and its organs, on the Kidneys, on the Brain and Nerves, and on the Senses, we come to Observations on Generation, which occupy a large proportion of the physiological part of the work. To this interesting subject, Hunter gave much attention; and his observations on the development of the chick *in ovo* give ample proof of his desire and aptitude for scientific research. In speaking of the principles governing the formation of animals, he shews that he had a very clear view of the doctrine of gradation in development as well as in adult form. He says:—

> "If we were capable of following the progress of increase of the number of the parts of the most perfect animal, as they first formed in succession, from the very first to its state of full perfection, we should probably be able to compare it with some one of the incomplete animals themselves, of every order of animals in the creation, being at no stage different from some of the inferior orders. Or, in other words, if we were to take a series of animals, from the more imperfect to the perfect, we should probably find an imperfect animal, corresponding with some stage of the most perfect." (Pp. 203-4.)

Evolution, epigenesis, and metamorphosis, are three terms which modern science has applied to the principles on which the parts of animals are supposed to be formed. It is interesting to observe how completely Hunter enunciates the definitions of these words, without formally mentioning them. He speaks of three principles as being introduced in the formation of animals, though probably not all in the same animal, nor in the same order of animals. One he defines to be the principle by which "the part is laid at the very beginning, and its visible perfection is no more than the parts beginning to grow as they are wanted"; this—analogous to the modern principle of evolution—he believes to hold good with regard to the *materia vitæ universalis* and the absorbing system. The second principle, which moderns call *epigenesis*, is defined by Hunter as that under which new parts are formed as the embryo is advancing towards perfection, as in the formation of the brain and heart, nerves and vessels, etc. The third principle is that of *metamorphosis*; which Hunter illustrates by alluding to the changes in form which already existing parts undergo, with a view to the performance of their functions.

In connection with this subject of embryonic development, we may notice the remarks on Monsters which occur a few pages further on. The key to Hunter's ideas on the subject of monstrosity is, perhaps, nowhere better furnished than in the following extract:—

> "Monsters are not peculiar to animals; they are less so in them, perhaps, than in any species of matter. The vegetable kingdom abounds with monsters; and, perhaps, the uncommon formation of many crystals may be brought within the same species of production, and accounted for upon the same principle, namely, some influence interfering with the established law of regular formation." (P. 240.)

Hunter believed in fact that, in order to explain the formation of a monstrosity, it is necessary to go back to the early stages of development of the being. In his collection, he arranged monstrosities under the following heads:—1. Preternatural situation of parts; 2. Addition of parts; 3. Deficiency of parts; 4. Combined addition and deficiency of parts. In the remarks before us, the possible causes of monstrosity by addition or by deficiency are noticed. Speaking of monstrosity by supernumerary parts, Hunter combats the theory which had been advanced, that such parts were the remains of a twin which had grown to the other like budding in vegetables. In the cicatricula of the egg of birds, he says, there are never formed two chickens; and when twins are produced in one egg, it is from two yolks; and yet monsters by excess are observed in chickens. To explain monstrosities, whether in excess or in defect, he starts the following hypothesis, after again insisting on the necessity of investigating the formation of the fœtus at as early a stage as possible.

> "A part having the power within itself of elongation, will have the power of varying that elongation according to circumstances; therefore, a head not yet formed, but having a disposition to form, may, by some accident, be disposed to be formed into two heads, and the same with every part of the body. On the other hand, that, or any other part, may lose the disposition to form at all; and the fœtus, therefore, be deficient in such part; or the disposition in the part for growth may be imperfect, and then there is no knowing what form it may be of, just according to the nature of the imperfection." (P. 244.)

In these observations of Hunter on monsters, those who are interested in the study of the subject will doubtless at once recognise to how great an extent the explanations were present to his mind, which have subsequently been enunciated by Geoffroy St. Hilaire and other teratologists.

[*To be concluded.*]

Progress of Medical Science.

Congenital Encephalocele: Hernia of the Cerebellum. Dr. Matthews Duncan relates the case of a child which was born with a large tumour, of the size of the child's head itself, fixed to the region of the occipital protuberance by a short pedicle about an inch in thickness. The infant lived forty-seven days, during which time it uttered no sound of any kind, and only occasionally moved its limbs feebly. It did not suck, and was with difficulty fed by the hand. Three days after birth, the indications of respiration having taken place were extremely feeble; as it grew older, the breathing became more established, but the lungs were never fully expanded. On the thirty-second day, the tumour having increased to double the size of the head, Dr. Duncan punctured it with a small cannula and trocar, and drew off about fourteen ounces of fluid. The portion drawn from near the centre of the mass, above twelve ounces in quantity, was brown, turbid, of specific gravity 1010, and of alkaline reaction: nitric acid threw down a dense flocculent precipitate, while boiling produced only a cloudiness. Two ounces, removed from near the aperture in the integument, were more transparent and straw-coloured, of specific gravity 1012, and neutral: heat and nitric acid gave the same results as with the other. The tumour was diminished by the tapping to about one-fourth of its previous dimensions; but it speedily refilled, and, fifteen days afterwards, the child died very quietly. On examination, the cranial cavity was found to be destitute of the cerebellum. The crura cerebelli passed through an opening in the occipital bone, just below the protuberance, scarcely large enough to admit the finger. Pressure on the tumour caused the contained fluid to pass into the cerebral ventricles, evidently through the aqueduct of Sylvius and the third ventricle. The wall of the tumour consists of two layers—one formed of skin, aponeurosis, and a fibrous membrane resembling dura mater; and one internal of brain-tissue, very thin at the outer part, but becoming more dense towards the cranium. At the interior, emerging from the aperture in the bone, and soon becoming spread out and lost, were two thick masses—evidently the crura cerebelli. The brown fluid had evidently been derived from the interior of the sac of brain-tissue, and the clear fluid from the outer arachnoid space. The expanded brain-tissue and its vessels had undergone fatty degeneration. Dr. Duncan does not attempt to explain the original formation of the hernia; but he attributes the dropsy of the tumour to the compression of the vessels of the peduncle and the consequent obstruction to the circulation. He believes that, had the distension of the growth advanced much further within the uterus, it would have burst, and have thus illustrated, in the case of the cerebellum, the mode of production of at least some cases of anencephalic monstrosity. (*Edin. Med. Journal*, April 1861.)

Action of the Intercostal Muscles. Various theories have been advanced as to the action of the intercostal muscles, as follows:—(*a*) The two sets of muscles act alternately; the external in inspiration; the internal in expiration (Galen, Bayle, Hamberger, Hutchinson, Donders, Ludwig). (*b*) The two sets act simultaneously, in inspiration (Borelli, Boerhaave, Haller, Budge, Meckel, Meissner, Helmholtz). (*c*) Both sets act together, in expiration (Vesalius, Beau, and Maissiat). (*d*) Both sets act simultaneously, but sometimes in inspiration, sometimes in expiration, according to the fixed point. Dr. Chr. Bäumler has arrived at the following conclusions from experiments on animals, and from an examination of cases; in one of which a large portion of the pectoralis major was deficient, leaving the intercostals covered by the skin alone; and in another the muscles were exposed in the removal of a tumour of the breast. 1. The intercostals are called into action only in raising the chest, and hence usually act in inspiration. 2. Not only the external, but also the internal intercostals, act in inspiration. 3. The intercostals do not act in strong inspiration only, but also in ordinary tranquil inspiration. 4. In expiration, tranquil as well as forced, these muscles are relaxed. Schoemaker has also investigated the subject, with the following results:—1. The external intercostals and the muscles between the costal cartilages act as inspiratory muscles during thoracic respiration. 2. The internal intercostals are capable in certain circumstances of assisting the action of the external. 3. The internal intercostals proper act as expiratory muscles in deep thoracic respiration, and as inspiratory muscles in abdominal respiration. (*Schmidt's Jahrbücher*, Bd. 109.)

Premature Dentition. Dr. Thore arranges instances of premature dentition in two categories—1. Cases in which the teeth are present at birth, or appear soon afterwards, and in which they are not shed until the period of the second dentition. 2. Cases in which the teeth appear prematurely, and fall out in a short time, in consequence of a pathological condition of the dental follicles. Of the latter class, five cases had been observed by Dr. Thore. The date of the appearance of the teeth was in one case a fortnight after birth, in two a month, and in two six weeks; but they fell out almost immediately afterwards. At the front of the gum corresponding with the tooth which was about to appear, a greyish ulcer was formed. After the teeth had been shed, a round projecting tubercle, of a deep red, violet, and blackish colour, was at once developed; the ulceration extended, and the jaw became softened and carious. In one case, fragments of the bone were detached; in another, the ulcerative inflammation extended to the integuments of the chin. (*Comptes-rendus des Séances et Mém. de la Soc. de Biologie;* et *L'Union Méd.*, 9 Avril, 1861.)

Quinine in Scarlatinal Dropsy. Dr. Hamburger concludes a long paper on scarlatinal dropsy by giving his experience of the use of quinine in that morbid state. He has given it in forty-seven cases, in forty-four of which improvement took place immediately or in a few days; in three there was no change either for better or for worse. The effects observed are, diminution of the febrile symptoms of the subacute stage, increased secretion of urine, which becomes clearer, reabsorption of exuded matters, even removal of already formed abscesses, and return of the appetite and strength. The urine, however, continues albuminous for some time; but this does not interfere with the progress of convalescence. Dr. Hamburger, in summing up his observations, says that the action of quinine in scarlatinal dropsy is most productive of good results, and most rapid in the chronic stage: here improvement sets in almost immediately after the first doses. At the commencement, so long as the acute stage is present, the quinine may be delayed for some days, if the danger be not pressing. On several occasions, Dr. Hamburger has seen the patient remain for several days in the same state, or even gradually become worse; the urine becoming darker and the exudations increased. But, when quinine was fearlessly given, a happy result followed. If marked improvement do not appear after the medicine has been given four or five days, it is to be omitted; but even in this instance it should not be regarded as being useless, as the specificity of the disease appears broken by it. The dose is gr. iss to gr. ij twice a day for children; and for adults gr. iij or gr. iv. During the use of the quinine, great attention must be paid to the diet; especial care being taken not to overload the irritable intestinal canal with slops. (*Prag. Vierteljahrschrift*, 1861.)

Perforating Ulcer of the Foot. M. Demarquay lately had under his care a man aged 63, who for a period of seven years had from time to time been affected, on each foot, with ulcers which gradually destroyed the tissues of the sole, and at last produced necrosis and exfoliation of several portions of bone. Some of the ulcers occurred in the site of corns or of thickened portions of epidermis; while others were formed in parts merely subjected to pressure. This affection is a very rare one, and the cause of it is obscure. It does not appear, M. Demarquay observes, to be connected with long standing on the feet. In the early stage, the disease is likely to escape the attention of the patient; and in the more advanced period there is a remarkable loss of sensibility in the part, so that, as M. Demarquay and M. Nélaton have noticed, the patient can bear being operated on without chloroform. In several cases, this perforating ulcer has rendered necessary partial amputation of the foot, or resection of a metatarsal bone. In most cases, the disease returns; but, if the patient be seen early, the ulcerated parts may be removed, and the actual cautery applied. If necrosed bone be detected at the bottom of the wound, iodine injections may be used to expedite the removal of the sequestrum. (*Union Méd.* April 16th, 1861.)

Treatment of Entropion. M. Bonnafont states that he has successfully treated several cases of entropion in the following manner. A portion of the skin of the eyelid is pinched up, so as to turn the cilia from the eye; and is then held in position by means of a *serre-fine*. The *serre-fine* is allowed to remain for two entire days, at the end of which there is generally some pain, with indications of perforation of the skin. At this period, M. Bonnafont has sometimes removed the *serre-fine* and applied another which exercised less pressure, and sometimes has allowed the strangulated portion of integument to become detached. The result has always been removal of the entropion and of the consequent conjunctivitis. This treatment is very similar to a plan adopted by M. Velpeau, of gathering up a fold of skin, applying sutures, and then excising it. M. Bonnafont, however, regards his method as less painful, more prompt, and more likely to produce an accurate union of the edges of the wound. (*Union Méd.* April 27th.)

Ascites complicating Pregnancy. Tapping an ascitic patient, who is also pregnant, generally tends to bring on premature labour. To prevent this, M. Pigeolet advises to puncture, with a fine trocar, the projection which is generally present at the umbilicus, and thus to allow the fluid to gradually drain away. He has employed this method with success in one case. (*Revue de Thér. Méd.-Chir.*, 1 Avril, 1861.)

Treatment of Condylomata by Chromic Acid. Lange treats venereal and other condylomata with a solution of one part of chromic acid in three parts of distilled water, applied by means of a glass rod. Common warts also can be removed without pain by the same application: they become of a brown colour, and gradually drop off. (*Prag. Vierteljahrsch.*, 1861, vol. i.)

British Medical Journal.

SATURDAY, MAY 18th, 1861.

THE APOTHECARIES' COMPANY.

We last week noticed the judgment given by Sir Page Wood in the matter of dispute between the College of Physicians and Apothecaries' Company. The terms in which that judgment was given were of so strong a character, as to lead us to think that its reversion was a thing hardly to be expected. We have not, indeed, heard that the Apothecaries' Company has, since the trial, taken any further steps with the intent of disputing the Vice-Chancellor's decision. If the Company, however, resolve to prosecute the inquiry further with the hopes of obtaining a different settlement of the case, its next weary pilgrimage must be in the narrow ways of a common law court. In this direction, however (if we may venture to act the *vates*' part), the difficulties which will meet the Company are greater than those it has already had to encounter. Probably, therefore, this body will be forced, from the nature of the case, to remain quietly dissatisfied with the Vice-Chancellor's way of putting it, and will, therefore, not appeal against his decision. At common law, as far as our appreciation of the question enables us to see, the Company's position, *vis-à-vis* the College, would be rendered worse even than it has turned out in equity.

Moreover, with the feeling of the profession so strongly expressed, as it has been, in favour of the proceedings taken by the College of Physicians to promote the education and raise the *status* of the general practitioner, we can hardly imagine that the Apothecaries will venture on the course of attacking a Licentiate of the College, as they now must do, if they go to common law for more justice. Should they, however, resolve once again to try their luck on the chance of this turn of the legal wheel, as a matter of course the College will protect the one of its individual offspring who may be made the conspicuous subject of the disputation. It will, as far as it is able, take care that the privileges conferred by its license shall not be interfered with by any corporation, or other person or persons whatsoever. On this point the College has, we believe, clearly expressed its determination. Under the shadow of its legal wings, the College Licentiate may, therefore, and in the meantime, rest in full assurance of honourable security.

If these views of ours be correct, bygones being received as bygones, are we then to come to the conclusion that the days of the Company are numbered? that Blackfriars will soon cease to be the nightmare of aspiring students? Really there seems no other than an affirmative answer to the question. All facts conspire to tell the event. Unfortunately for the Company, the College license, if it continue as it at this moment is, undisputed, gives every privilege to its holder which the Company's license gives, excepting that of keeping a shop. The enjoyment of this latter privilege by the College Licentiate would, indubitably, be an infringement of the by-laws, and might subject the poacher to forfeiture of his license. But we are not aware that there is any privilege really worth having, comprehended in the license of the apothecary, which is not equally well wrapped up in the folds of the College document. Under certain circumstances, indeed, the College license may render most convenient service to a medical man not only with as much efficacy as the Apothecaries' license, but (a most important point) with far greater promptitude. For instance, the Poor-law people require what is called a "double qualification" from their medical officers. If, then, a simple member of the College of Surgeons aspire to the honour of holding one of these appointments, he must encompass another qualification. Now the Apothecaries' Company cannot assist him unless he have passed through a five years' apprenticeship; but the College of Physicians at once hands over to him the article he requires, if he can shew on examination that he is worthy to receive it. We would especially point out this fact to those of our brethren, who possess only the diploma of the College of Surgeons. But more than this; the College expands in powers, in proportion as it emerges from its former state of quietism. Without metaphor, it may be called a sort of modern licensing Phœnix, hatched out of the elaborate dust of forgotten or dormant capabilities. The happy holders of its license possess, it would appear, not only the privileges above referred to; but they also obtain, in obtaining it, the right of practising surgery and midwifery without other qualification from any other body! Are the days of the College of Surgeons also numbered?

This is a curious page of medical history. The cruel instability of medical institutions is here strikingly, but yet not unsatisfactorily illustrated.

In this blossoming of the College and yellow leaf of the Company, the sympathy of the profession must go wholly with the latter. It is no blame to it that the Company perishes, for it bore within it from its birth the fatal weapon of its own destruction. Its connexion with trade was its fatality. If it could have shaken off that incubus, and could have met the growing aspirations of a liberal profession, it would have survived. Assuredly it has done every thing which it could have done in the unfortunate position in which it has been placed. It has done far more than other medical corporations to elevate the standard of medical education, and to make medical men fitting practitioners of medicine. Whilst other bodies have been asleep, it has been continually on the move; in fact, its progress has been the source of the life which has been infused into those dreamy corporations. *Meâ virtute me involvo,* the Apothecaries' Company may most justly say in this dire conclusion, adjusting its mantle for a fall. It has created the general practitioners of this country, demanding from them an education equal to that of an university education; in fact, it made its licentiates licentiates of medicine in every sense of the word, excepting only in that one of name. Could that fatal term have been erased from the Company's and the profession's memory, with a fresh mark on its forehead, this licensing body might have reaped its most just reward. Alas! we see here what there *is* in a name!

That the two Colleges have obtained more, and the Apothecaries' Company less, than their respective past conduct entitles them to, is to us a very clear fact—regrettable from a point of view of abstract justice, but apparently to be accepted as an unavoidable necessity. The Apothecaries' Company has ever done its work well and thoroughly; the Colleges have hitherto shamefully neglected theirs. The inevitable conclusion—the legal decision—is one which must be submitted to as of necessity; but the present *victores ovantesque* in the race will have a deal of honest work to do, in order to justify the position they have assumed, and as penance for their years of pride, selfishness, and negligence. Never has a Company come to a conclusion (if so it must be with the Apothecaries') with a clearer conscience of having fulfilled its destiny; and never, perhaps, has a corporate body set about a new work with a conscience more burdened with past omissions of duty than does the Royal College of Physicians of London.

But what if, after all, the Apothecaries' Company should determine to try their fortune by common law, and common law should be propitious to them? Well! we must confess that in such a case poetical justice will have been done, although our vaticinations and reasonings will have been proved vain, and our anticipations of coming advantages to the profession rendered futile.

POOR-LAW MEDICAL REFORM.

We beg to call the attention of our readers to a series of Resolutions passed at a Meeting of the Metropolitan Poor-law Medical Officers. The object of these Resolutions is to bring before the Parliamentary Poor-law Committee the defects of the present Poor Laws, so far as they affect Medical Relief. We sincerely hope that our brethren will, each as far as he can, lend a hand to reform the abominable abuses under which this Poor-law Medical Relief is groaning. The suggestions made by the Committee are clear and to the point. The truth is that no living soul—not even the greatest admirer of Poor Laws—will venture to say that the system referred to is not most defective. The grand point—and this all admit—is how to find out a remedy. The Poor Law, we must remember, is founded on commercial principle, or rather commercial want of principle; and, consequently, the item of free-trade enters freely into its embodiment. If A demand 2*s.* 6*d.* for certain work, and B will undertake to do the same for 1*s.* 3*d.*, it is clear that there is a saving—at all events, in appearance—of 1*s.* 3*d.* to the contractor, if he accept the tender of B. Now this is practically the whole mystery of this iniquity; B. is accepted by Poor-law Guardians. One member of the profession undersells another, and the governmental hawk takes advantage of the competition. It is a sad thing for our profession, that this competition should be so glaring a part of it; but so it is, and must continue, as far as we can see. If we were only true to ourselves, the official hawk would not be able to rend us as he does. Our divisions are his opportunity. And as no relief can be expected from any combination on our part, we must, as the only other resource, appeal to the justice and common sense of the powers who rule the position. We must endeavour to operate upon the more enlightened sense of those who can see things somewhat out of the sphere of mere profit and loss.

To men who will take a fair and impartial view of the case, it must be readily evident, that to ask men to do an enormous amount of work for an equivalent in pay which is not enough to provide the quadrupedal means of locomotion required for the performance of the work, is an iniquity and an absurdity. It is unjust to him who by circumstances feels obliged to accept the terms offered; and grossly unjust to the paupers, who are the objects of the contract. It is beyond human nature, to suppose that doctors can afford to give proper services for improper pay; and it is no blame to those of our brethren who are placed in these posts, if they are unable to perform satisfactorily the duties imposed upon them. What proves the injustice of the thing is this: that different districts act in different ways; that in some the treatment of the Medical Officer is infinitely better than it is in others. One plan condemns the other. Let our brethren, then, if they cannot combine, endeavour to awaken a right feeling —a feeling of simple justice—justice to the pauper, and justice to his medical attendant—in the minds of the Parliamentary Committee. But, let us ask, ought the Medical Council to be silent in this important matter? Is the Council simply a mere Registering Body and Educational Committee, or has it not still other and wider duties to perform? We confess that, in our opinion, if it be worth its salt, it should take under its supervision the whole status of the profession, *in so far as the profession is affected by the Legislature.* Manifestly it is a species of go-between, between the profession and the Legislature. From its mouth the Legislature will in future naturally take its cue in legislating for the profession. Commons and Lords will no longer consent to be the listeners to the infinite differences of doctors. "What says the Medical Council?" will be their response. This being the position necessarily arrived at through the erection of the Council, it becomes clear that the Council ought to take charge of every question which touches the medical profession in its relation to the Imperial Government. Now, we will ask plain common sense this question: If the Medical Council—the solemn representative and voice of the whole profession—were to state broadly and strongly to the Government, that the Poor-law Medical Officers were most unjustly treated, could the Government refuse to listen to its assertion?

THE WEEK.

At the Royal Medical and Chirurgical Society, on Tuesday last, Dr. Waters of Liverpool related the results of numerous experiments, which he has performed, for the purpose of ascertaining the influence of the hot-water bath on asphyxiated animals. The main conclusion, which inevitably follows, and which must be accepted as true, provided the correctness of his experiments are hereafter duly corroborated by further investigation, is a very practical and important one. It is this: That the hot-water bath, so far from being an aid in restoring to animation the demi-drowned, is actually prejudicial to the restoration. The phenomena observed by Dr. Waters were these. Animals were submerged in water for a given time, until, in fact, motion had ceased; they were then removed from the water and plunged, some of them, into a hot-bath, and some left quietly exposed to the air. A very large proportion of those which were left to Nature's care recovered; whilst, on the contrary, a very large proportion of those subjected to the *nimium diligentiæ* of a hot-bath perished. In the hot-bathed animals, the lungs were found highly congested, loaded with blood, and much heavier than in the others; and both sides of the heart were highly distended. We should, therefore, at once advise all Humane Societies, whose rules enjoin the warm-bath process, to reconsider their position. If Dr. Waters's conclusions be correct (and we believe that his experiments in this matter are at present unique), the Humane Societies above mentioned lay down a rule, whose practice assists in the extinguishment of the last glimmers of the vital spark still lingering in the body.

A correspondent sends us a striking example of the outrages daily inflicted on our profession by the doings of unlicensed men, who surreptitiously attend the sick and supply medicines. Unfortunately, as the law at present stands, there is, we fear, little chance of arresting their proceedings. The Apothecaries' Company's powers of restraining and putting down the abuse have been long shown to be practically valueless; and we really do not see any other way to a solution of the difficulty, than the passing of an Act of Parliament which shall subject to fine and imprisonment every person who gives medicine to the sick without a license. But, then, such an Act as this, in our free-trade country, would never pass muster with our legislators, and, we must confess, would in many ways be open to serious objections. We fear there is no chance of putting an effectual stopper upon the druggist's doings, as mentioned in our notices of this day. Our correspondent justly complains of the attendance of an unlicensed man, a druggist, on a case which proved fatal; and very properly refers the matter to the coroner. The history of the case may be inferred from the sensible and satisfactory (as far as it could so be) answer of the coroner to the complaint. We give this answer in full, because we think it is worthy the attention of coroners in general, as being an indication for a rule of action which they are not, usually speaking, over much inclined to obey. We subjoin the coroner's reply:—

> "Sir,—In the case of the child which you were kind enough to cause a report to be made to me, I learn that a druggist had seen and prescribed for it, and that he afterwards advised the parents to apply to you; and that your son had attended to it for four days previous to death. I could not learn that anything deleterious had been given to the child; and my practice always is, when a person has had the benefit of medical advice for a reasonable period before death, and in the absence of any injury of any kind, not to interfere; but in cases wherein quackery has been exercised, and there is reasonable ground for presuming that death has been caused by it, I have invariably interfered. I have a great objection to unskilful persons acting in case of sickness; and have, on several occasions, had to send them to the assizes for trial; and if the child had continued up to its death under the hands of a druggist, I should, in all probability, have had a *post mortem* examination, in order to ascertain the cause; but as there was no suspicion as to the treatment by the druggist, and the child had been under proper medical treatment four days previous to death, I do not consider myself justified in adopting that course."

The Epidemiological Society's Council has, we understand, consented to recommend its members to come into the union proposed by the Royal Medical and Chirurgical Society. The Obstetrical's Council has, as we have already noticed, entered a negative vote to the compromise. The Pathological Council will probably declare its sentiments on the subject next week.

We notice a strange melodrama which was, on Monday last, played in the House of Commons; because it illustrates remarkably well the ignorance of even educated men concerning the phases of a lunatic's mind, and also what would seem to be a defect in our laws affecting lunacy. A gentleman, feeling conscious of his weakened mental condition, places himself voluntarily under medical control, and enters an asylum, fortified with the certificates of two physicians, who declare him to be dangerous. On the occasion of an exciting vote in the House of Commons, he quits his seclusion, and suddenly appears amongst his colleagues and gives his vote. The impropriety of the proceeding is self-evident; but it was defended and reprobated, as far as we can judge, purely from a political point of view—the side which received the unfortunate gentleman's vote backing, and the other side blaming, the transaction. Some members ridiculed the idea of insanity, because the gentleman had conversed most rationally with them; others said, that in the interval of his residence in the asylum he had fully recovered his reason.

> "Did the House collect," said Mr. Malins, "that my hon. friend was sent to Dr. Forbes Winslow's asylum, under a certificate that he was dangerous to himself and others, on the 6th of April, and that his vote was not given till the 3rd of May, nearly four weeks afterwards? During that interval Dr. Winslow had permitted Mr. Steuart to come to London, to visit his friends, and, in short, to be treated in every respect as a man of sound mind. If, therefore, the physicians who signed the certificate were right on the 6th of April, it is perfectly plain that a change must have taken place during the month in the mental capacity of Mr. Steuart, or that Dr. Winslow was guilty of great neglect of duty as the keeper of an asylum."

Dr. Winslow, it was stated, strongly urged the gentleman not to go to the House; but we are not told why he did not prevent his going, if he had the power so to do. What seems to us unanswerably to prove that the gentleman should not have been allowed to enter the House is this plain fact, that if, in a fit of mania, he had committed some murderous act, he could not have been dealt with as a responsible individual. If the law does not enable the master of a lunatic asylum to exercise restraint over all the inmates of his asylum, it is manifest that the law is defective.

The Society of Anthropology of Paris has published its first volume of *Transactions*. The following are the principal contents: On the Ethnology of France, by M. Broca; Observations on Microcephaly, by M. Gratiolet; Communications relating to Human Fossils, by MM. Pouchet, Geoffroy St. Hilaire, etc.; a Report of M. Perrier on the Influence of Consanguinity on the Offspring; Communication by M. Rufz, on the Anthropology of Tahiti; etc.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
East York and North Lincoln. [Annual.]	Hull Infirmary.	Wednesday, May 22, 1.30 p.m.
South-Western. [Annual.]	Rooms of the Royal Institution of Cornwall, Truro.	Wednesday, June 5th, 3 p.m.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-fifth Annual Meeting of this Branch will be held at Liverpool, on Wednesday, June 5, under the presidency of Edward Batty, Esq.

Gentlemen who intend to read papers, are requested to send notice to the Honorary Secretary as early as possible.

A. T. H. Waters, M.R.C.P., *Hon. Sec.*

Liverpool, May 1st, 1861.

SOUTH-EASTERN BRANCH: ANNUAL MEETING.

The Annual Meeting of this Branch was held at the Crystal Palace, Sydenham, on Wednesday, May 8th, at 3 p.m. There were present forty-two members and sixteen visitors. The chair was first taken by the retiring President, F. Fry, Esq., of Maidstone, who introduced his successor, G. Bottomley, Esq., of Croydon.

President's Address. Mr. Bottomley commenced his address by proposing a vote of thanks to his predecessor; he then thanked the members of the Branch for the honour conferred on him; and, on the part of his colleagues and himself, offered them a hearty welcome. He was happy to say that the members of the South-Eastern Branch had not diminished; but death had removed three valued members—Mr. Stedman, Dr. Plomley, and Mr. Turner. The next subject to which he had to allude was the Journal. The selection of editor by the Committee of Council had been very fortunate. The Journal was now greatly improved, the articles were well written, and the contributions well selected; and he thought the Journal might now stand on a level with the other medical periodicals. Instead of the editor being under an obligation to the members of the Association, they must feel themselves under an obligation to him. He (Mr. Bottomley) trusted the members would increase, so that the time and labour bestowed might be more adequately rewarded. He then briefly alluded to the Medical Act, and observed that the present manner of conducting Poor-law medical relief was surely a disgrace to our country, an injury to the poor, and also to the medical profession. Great credit was due to Mr. Griffin for the time and expense he has given to the subject. The Poor-law Convention worked for several years, and obtained a Committee of the House of Commons to investigate this subject; but that too left off where it began. He believed, if the matter were laid before the Medical Council by the Council of this Association, something might be done. The subject of vaccination should also be placed before the same Council, to endeavour to obtain an Act that would benefit alike the public and the profession. The past summer of 1860, although unusually wet, was also unusually healthy. This was doubtless owing to the low temperature. Without heat, we are free from many noxious exhalations from the earth; the rain washed away many impurities; and thus the wet and cold season was also the most healthy known for some years past.

Report of Council. Dr. HOLMAN, in the absence of Mr. Peter Martin, the Honorary Secretary, read the following Report.

"In meeting their brother-members of the South-Eastern Branch in this beautiful palace of art and science, the Council have to state that the number of members remains about the same, the losses by withdrawal and death being counterbalanced by the accession of new members. In the present prosperous condition of the Association, which, with nearly restored finances, sends weekly its JOURNAL, reinvigorated by fresh efforts, to the remotest corners of the district, the Council can only express its surprise and regret that there are so many respectable practitioners who are unwilling to join their brethren of the profession in the membership of the only medical association in the kingdom which unites all classes, and through which the voice of the profession can be heard.

"The South-Eastern Branch has to-day to lament the loss of three members who were present at the last anniversary, but who have since been removed by death; and the Council feel that a tribute is due to the memory of Mr. Stedman of Guildford, one of the earliest members and most constant attendant at our meetings, who presided so ably and hospitably over one of our anniversaries as President of the Branch; of Dr. Plomley of Maidstone, whose cooperation had been given to the Association from an early period, and who did much to aid in the cordial reception given to the members of the Branch last year at Maidstone; and of Mr. Turner of Tunbridge Wells, long a zealous member and a frequent attendant at our meetings, whose premature death will find many regrets among those who knew him well.

"At the last general meeting it was determined that a petition should be sent to Parliament by the Branch against the present unfair incidence of the Income Tax. The Secretary accordingly prepared a petition, which was signed by the President of the Branch, and duly presented. The Council congratulate their constituents on the fact that Mr. Hubbard's motion for a committee, having in view a more equitable adjustment of the tax, was carried by a majority of four. This small majority, however, shows the necessity for increased exertion, not only by sending petitions from separate towns and parishes, but by pressing the subject personally on members of Parliament, many of whom would not disregard the expressed wishes of their influential medical friends.

"The Council desire to call attention to the fact that the British Medical Association will meet at Canterbury in July next, for the first time in the south-eastern district; and they urge upon the members of the Branch the propriety of doing all in their power to increase the success of the meeting by their personal attendance when practicable, and by using their influence with their friends, whether members or not of the Association, to assist in giving a worthy reception to those distant members who will on this occasion visit the ancient city of Canterbury. The Council have seen with sincere pleasure the continued success of the district meetings held at Rochester, Maidstone, Gravesend, and Dartford; and they would welcome with much satisfaction the formation of similar meetings in other districts where a sufficient number of members reside, at the same time believing, as they do, that with more frequent opportunities of meeting, an increased interest would be felt in the prosperity of the Association. They think the experiment might be tried of having a second general meeting of the Branch in the year; and, considering the central position of the Crystal Palace as regards railroads, they recommend that a general meeting of the Branch should be held at that place in the autumn of the present year."

Resolutions. The following resolutions were then unanimously passed.

Mr. THOMAS HECKSTALL SMITH (St. Mary Cray) proposed, and Mr. GOULD (Wateringbury) seconded—

"That the report of the Council now read be received and adopted."

Mr. CORDY BURROWS (Brighton) proposed, and Mr. HUNT (London) seconded—

"That the Annual Meeting of the South-Eastern Branch in 1862 be held at Reigate; and that Mr. Thos. Heckstall Smith, of St. Mary Cray, be requested to fill the office of President, and Mr. Steele of Reigate, and Mr. Smith of Crawley, the office of Vice-Presidents for the ensuing year."

Dr. WESTALL (Croydon) proposed, and Mr. BURTON (Blackheath) seconded—

"That the best thanks of the Association are due to Mr. Fry, President, and Messrs. Hoar and Gould, Vice-Presidents, for their kind exertions on behalf of the Branch during the past year."

Representatives in the General Council. The Secretary having cast up the votes given by voting-papers, it was found that the following were elected members of the General Council:—W. Addison, M.D., F.R.S., Brighton; G. Bottomley, Esq., Croydon; J. C. Burrows, Esq., Brighton; F. Fry, Esq., Maidstone; A. Martin, M.D., Rochester; J. Reid, Esq., Canterbury; W. Sankey, Esq., Dover; E. Westall, M.D., Croydon; J. W. Woodfall, M.D., Maidstone.

Council of the Branch. The following gentlemen were elected members of the Council of the Branch:—J. M. Burton, Esq., Lee; J. Dulvey, Esq., Brompton; W. Hoar, Esq., Maidstone; C. Holman, M.D., Reigate; G. Lowdell, Esq., Brighton; T. Heckstall Smith, Esq., St. Mary Cray; H. Collett, M.D., Worthing; W. Steele, Esq., Reigate; C. M. Thompson, Esq., Westerham.

New Members. The election of the following new members was then confirmed:—

Robert James Rogers, Esq., Sussex County Hospital.
Thomas H. Lowry, M.D., Town Malling.
Frederick B. Hallowes, Esq., Red Hill.
Lewis Smythe, M.D., Lewes.
Robert L. Bowles, Esq., Folkestone.
Samuel Solly, Esq., F.R.S., London.
E. A. Parkes, M.D., Rochester.
Thomas Boycott, M.D., Canterbury.
Robert Tassell, Esq., Canterbury.
Robert Martin, M.D., London.
William Soper, Esq., Guy's Hospital.
John Flint South, Esq., F.R.S., Blackheath.
William Carr, Esq., Blackheath.
William J. Harris, Esq., Worthing.
Thomas Gravely, Esq., Cowfold.

Donation to the Medical Benevolent Fund. Mr. THOS. HECKSTALL SMITH proposed, Mr. BURROWS seconded, and it was resolved—

"That a donation of £10:10 from the funds of the Branch be again given to the Medical Benevolent Fund."

Papers. The following papers were read:—

1. Case of Knot of the Funis, causing Death of the Fœtus (with preparation). By W. Sankey, Esq. (Dover).

2. Case of Acute Traumatic Tetanus, with Recovery. By F. Owen, Esq.(Leatherhead).

The Journal. Great satisfaction was universally expressed at the improved condition of the JOURNAL.

The Dinner. The members and visitors dined together at five o'clock, in the saloon in the South Wing.

Special Correspondence.

DUBLIN.

[FROM OUR OWN CORRESPONDENT.]

In my last communication, I gave a sketch of the Medical and Surgical Licensing Bodies in Dublin; and on the present occasion, I purpose to offer some account of the societies established here for the discussion of matters of interest, and for the advancement of the profession.

In connection with the College of Physicians is its *Association*, composed of those members who may be elected by its Council. Frequent meetings were held, and cases brought forward for discussion. At the last meeting, a most elaborate paper was read by the Rev. Professor Haughton, F.T.C.D., on Diabetes Mellitus. Were it not that this communication is being published, we should enter upon its discussion; more especially because the learned Professor differs in many of his views from other modern investigators; especially in attributing to the kidneys themselves a considerable share in the act of producing sugar.

The members of the profession in Dublin who are devoted to midwifery, meet at the *Obstetrical Society* for the consideration of cases and other matters of interest connected with their speciality. Recently, Dr. Gordon read an interesting communication upon the subject of Ovariotomy, and gave the details of a case which proved fatal from subsequent internal hæmorrhage.

Under the patronage of the Royal College of Surgeons of Ireland, and under the same presidency, is established the *Surgical Society*, for the discussion of cases of surgical importance, operations, and so forth. Its meetings take place every alternate Saturday during the winter session; and the last meeting, which took place on April 27th, was devoted to a most brilliant *conversazione*, which passed off with marked *éclat*.

Last, though not least assuredly, is the *Pathological Society*, for the exhibition of morbid specimens, and the relation of notes and details immediately connected therewith. The Dublin School of Medicine is proud to think that it originated such an institution; and the regular attendance of the most eminent in this city sufficiently testifies to the estimation in which they hold the information to be gained at its meetings. These are held every Saturday during the session, and its rules secure brevity and save expenditure of time; each contributor must speak in reference to a morbid specimen; and no discussion is allowed. To encourage the students of Dublin to industry and research in morbid anatomy, and to habituate them to express their information in writing, the Pathological Society at the close of each session offers a gold medal to the author of the best essay written upon a subject proposed by the Council of the Society at the commencement of the year. The essayists send in their productions under feigned names; and, together with each, an envelope containing the real signature. The essays are judged, and the medal awarded, long before the real name of the successful candidate is known; and it is only on the last day of meeting that the envelope on which the assumed name of the winner is inscribed, is opened, his real name publicly declared, and the medal bestowed. To the President falls this happy task of breaking the seal. Last session, Dr. Fleming occupied this honoured post; and at the close of the session, on April 20th, he spoke of the benefits to be obtained from the Society, and congratulated the members on its steady and successful progress. He then alluded to the subject decided upon by the Council as that for the gold medal; viz., "Diseases of the Cord, the Testicle and its Coverings," and said that this year there were eight essays, being double the number of any since the formation of the Society. All those essays were highly creditable to the Dublin School of Medicine; and five out of the eight possessed preeminent merit. To one of those five, marked "Testa", the Council unanimously awarded their gold medal. In consequence of the very creditable character of the remaining essays, the Council felt justified in adding a silver medal. The decision respecting it was very difficult. After mature deliberation, however, the essay marked "Prometheus" was selected, the Council at the same time having directed the President to signalise the essay signed "Juvenis Dublinensis" as a production worthy of the highest consideration, such being no slight praise where all were so excellent. The sealed envelopes enclosing cards with the real names of the successful essayists, were then formally opened, and the President proclaimed the winner of the gold medal to be Mr. William Stokes, whose essay, illustrated with coloured drawings and tabular charts of morbid phenomena, were exhibited and inspected with marked admiration by all present. The writer of the next successful essay was declared to be Mr. William Foot.

I cannot terminate the present communication without alluding to the sad event by which a sorrowful shade has, within the last few days, been thrown over the medical profession in Dublin. I allude to the *Death of Professor Porter*. This melancholy and unexpected demise took place suddenly on Saturday night, April 27th.

During the past forty-two years, the late William Henry Porter occupied a prominent place in the front rank of the profession in Ireland; and no one during that period strove more earnestly or more successfully to elevate the profession, to extend its usefulness, and to educate the young aspirants to its duties. Since the year 1819, he filled the office of surgeon to the Meath Hospital, and there obtained the reputation of a sagacious surgeon, of an intrepid and accomplished operator, and of a learned and perspicuous teacher. In the year 1836, he succeeded the late Mr. Colles in the Professorship of Surgery in the Royal College of Surgeons of Ireland—a post of responsibility and honour which he retained to the last. In the year 1860, he was elected as Representative of that College on the Medical Council, in the place of the late Dr. Robert Carlisle Williams. Besides practical attainments of the highest order, he possessed capacities as an author exceeded by few, if any. His productions are too voluminous for special mention, and several are too well known to require it; for example, his essays *On the Affections of the Larynx and Trachea; On the Ligature of Arte-*

ries; On Aneurism; his contributions to the *Cyclopædia of Anatomy and Physiology;* and his writings in various periodicals on most of the subjects of practical interest in surgery.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

Thursday, May 2nd, 1861.

E. H. Sieveking, M.D., President, in the Chair.

REMARKS ON SOME DISEASES OF THE RECTUM. BY JAMES R. LANE, F.R.C.S.

Mr. J. Lane drew the attention of the Society to the subject of hæmorrhoidal disease, his remarks being founded on the experience obtained during a three years connection with St. Mark's Hospital for Diseases of the Rectum. Subdividing these complaints in the usual manner into external and internal, he commenced by briefly describing the nature of the two conditions, giving his views with respect to the structures involved, and an account of the leading symptoms in each.

In speaking of the treatment of swellings situated externally to the anus, he said that when they were caused by the rupture of a dilated hæmorrhoidal vein, the best and most effectual remedy was an incision to allow the coagulum to escape; and that when they were formed by enlarged and inflamed portions of skin, excision by the knife or scissors was the only method which could be depended upon for effecting a permanent cure. He strongly condemned the use of the ligature, which, notwithstanding all that had been written on the subject, he still found to be not unfrequently employed.

With reference to the *curative* treatment of internal hæmorrhoids, two principal methods had been practised—excision and the ligature; to which might be added a third, namely, cauterisation with nitric acid. Excision, which was formerly the common practice, possessed many and great advantages. The tumour could be readily, rapidly, and completely removed; the operation was attended with less pain, both at the time and subsequently, than was occasioned by the ligature; it produced less irritation, and was followed by more rapid recovery. It had, however, one very serious disadvantage, the liability to dangerous hæmorrhage, enhanced by the difficulty in getting at the bleeding surface to arrest it. This danger had been felt to be so great as to outweigh all its other advantages, and had led to its almost complete abandonment in the present day, and to the substitution of the ligature in its place. In every respect, however, except in avoiding the risk of bleeding, the operation by ligature was inferior to that by excision. Such being the case, it would be admitted to be a great desideratum, if an operation could be contrived which should combine the principal merits and avoid the principal demerits of both. Such an operation had been devised by Mr. Salmon, and had been practised by him with great success for many years. He did not think this operation was by any means so generally known as it deserved to be; and one of his reasons for bringing the subject of hæmorrhoids to the notice of the society, was for the purpose of explaining its nature. It might be said to be a sort of compromise between excision and the ligature. It consisted of a separation of the hæmorrhoidal tumour from the subjacent parts for about the lower three fourths of its extent, leaving it attached by the remaining upper fourth, which was then included in a ligature. The tumours were drawn down by means of a hook with four prongs contrived for the purpose, and the division of the lower part of them was made with scissors. These structures were always supplied by vessels which descended from above, close beneath the mucous membrane, and the trunks being necessarily included when the upper part of the tumours was tied, all danger of bleeding from the divided branches was avoided. By this proceeding, the smallest possible amount of tissue was included in the ligature, and what was included was, as far as possible, removed from the anus. This latter circumstance he believed to be a great advantage; for the membrane, an inch within the anus, possessed little of that acute sensibility which characterises the integument close to that aperture. The operations being thus far completed, another point of importance was the management of the œdematous and everted collar of integument which always surrounds internal hæmorrhoids when they are protruded. The protrusion from within is necessarily accompanied by an eversion of the skin, with which it is continuous, and it by no means follows that there is any superfluity of this latter tissue. To remove all the apparently superfluous skin would be followed by a greater evil than the disease itself—an irremediable contraction of the anal aperture after cicatrisation had taken place. The rule which he had found it desirable to follow was, to remove all irregularities and all pendulous portions of skin freely, but not to meddle with the circular fold which surrounds the protruded parts. It might be expected that inconvenience would, in like manner, result in the interior of the rectum, from the free removal of mucous membrane, which was a necessary part of these operations; such, however, he had not found to be the case. He had, indeed, in some few instances, when the disease was extensive, seen a decided narrowing of the lower end of the rectum for some weeks after the operation; but it had, in every case, gradually subsided, and all inconvenience had disappeared. The cicatrices of mucous membranes did not appear to have the same tendency to contract, or to remain firm and rigid, which was found to be the case with cicatrices of the skin. In Mr. Salmon's operation, the adoption of which he strongly recommended, he had found the subsequent pain and irritation were very much lessened, and, in evidence of this, he mentioned that he had very rarely found it to extend so as to involve the urinary organs; whereas retention of urine was, according to his experience, the rule rather than the exception after the ordinary operation with the ligature.

A circumstance which he thought well worthy of note was the very slight risk attending operations on the rectum, if anything like proper care were taken in the selection and management of cases. He had, during the last three years and a half, performed 166 operations for hæmorrhoids, 202 for fistula, and 97 for fissures, polypi, and procidentia, 465 in all; he had assisted at about an equal number in the practice of his colleague, Mr. Gowlland, making a total of upwards of 900 operations, and the results of all had been carefully recorded. Amongst them there had not been one case of pyæmia, not one case of erysipelas; in fact, excepting in four instances, there had not been a single complication at all of a serious character, or deserving of notice. These four exceptions were cases of tetanus, which occurred in the spring of 1858, within a short period of each other. Two had occurred in his own practice, and two in that of Mr. Gowlland. They all followed the operation for hæmorrhoids, and all four were fatal. He thought, however, that he was justified in looking upon these cases as accidental, especially as numerous deaths were occurring from tetanus in other hospitals in London at the same period, and the disease might, therefore, fairly be said to have been epidemic at the time. In one hospital which he mentioned, nine deaths from tetanus had taken place within a period of two months. It had never been noticed by others that operations on the rectum were especially liable to tetanus; and in his own subsequent experience, which extended to several hundred operations, he had seen no other example of it. Setting aside, then, these cases as altogether exceptional, he thought there were few operations in surgery which afforded with so much certainty such complete and permanent relief from serious disease at so small a cost of suffering and risk.

With respect to the treatment of hæmorrhoidal tumours by nitric acid, his experience did not lead him to recommend it for general adoption; but neither was he disposed to condemn it indiscriminately, as some of its opponents had done. No doubt much injury might be done, and had been done, by its careless employment; but he had himself used it in twelve cases, and his objection to it was rather on the score of its inefficiency than on any active injury which he had found to result from it. He believed it to be well adapted for those cases in which there was an abnormally vascular condition of the mucous membrane of the rectum, without the development of large or distinct tumours which could be protruded; but, under the opposite circumstances, repeated applications of the acid were necessary to reduce the diseased parts to the level of the surrounding surface; and the treatment thus occupied a much longer time, was in reality much more severe, and much less likely to be permanently successful, than the operation by the ligature, or that modification of it which he had recommended.

The paper was illustrated by a series of drawings, for which the author said he was indebted to the kindness of his colleague Mr. Gowlland.

Mr. Baker Brown could confirm the recommendation made by the author of the paper of opening freely that variety of external pile which was suddenly formed by the rupture of a hæmorrhoidal vein; the relief was instantaneous, and the danger of bleeding none. He had tried the plan of tying internal hæmorrhage, as recommended by Mr. Lane; and, although it possessed many advantages, still he had occasionally found considerable contraction of the anus after their removal. He preferred simply dividing the skin where it joins on to the mucous membrane, before applying the ligature; carrying out, in fact, the golden rule laid down by the late Mr. Copeland, "Cut skin, tie mucous membrane." Mr. Brown always used ligatures of twine in preference to silk. With respect to an observation made by the author, that there was more bleeding in women than in men, Mr. Brown explained that it arose frequently from a suppressed action of the menstrual discharge, or from the cessation of that discharge at certain changes of life. Mr. Brown could confirm the statement of the author as to the safety of all operations of this kind, as he had performed a large number, amounting to many hundreds, and had never met with a single death or a case of pyæmia. Mr. Brown was quite certain that the cases of death recorded by the author from tetanus were due to a peculiar epidemic at that time pervading the country, as several cases of tetanus arose, both in London and the country, from different operations. Mr. Brown considered that the paper was of the highest practical value, and contained all that it was desirable to know of the surgical treatment of hæmorrhoids.

The discussion was continued by Mr. Weeden Cooke, Dr. Sieveking, Dr. Hare, and Dr. Priestley.

Mr. Lane replied to the remarks made by the several speakers; and, with reference to Mr. Brown's observation, that he had found contraction of the anus follow the operation he had been recommending, said he believed that permanent contraction of the anus itself always depended upon the removal of too much of the surrounding skin, and that the contraction sometimes observed just within the rectum was in like manner the result of the removal of mucous membrane. This latter form of contraction, however, he had always found to disappear spontaneously, after the lapse of a few weeks. It depended not upon the *mode* of removal, but upon the *amount* removed, which was often necessarily large. It was quite as likely to follow the one operation as the other; in fact, the worst cases he had seen had been after the old operation. He did not altogether concur in Mr. Copeland's maxim, always to cut skin and tie mucous membrane; he would always cut both, were it not for the danger of bleeding; and he thought the next best thing was to cut as much as was safe, and to tie the remainder. He believed it to be sound surgery never to remove tissues with a ligature, when it could be safely done by a cutting operation.

Medical News.

University of St. Andrew's. List of gentlemen on whom the degree of Doctor of Medicine was conferred, in May 1861:—

Baller, Joseph H., L.R.C.P., M.R.C.S. & L.A.C., Penahurst, Kent
Barratt, Edgar, L.R.C.P.Ed. (by exam.) & L.A.C., Brighton
Belinfante, Simon, M.R.C.S., Holland
Burrell, Lionel, L.A.C., Wesley, Bury St. Edmunds
Cheetham, Joseph, M.R.C.S. & L.A.C., London
Colah, Muncherjee Beramjee, G.G.M.C., M.R.C.S.Eng., L.M., Bombay
Coleman, Edmund Walter, M.R.C.S., London
Connell, Robert, M.R.C.S.Ed., Glasgow
Cuolahan, Hugh, L.R.C.S.I., M.R.C.S. & L.A.C., Bermondsey
Dobson, Thomas, L.R.C.P.Ed., M.R.C.S. & L.A.C., Leeds
Dudfield, Thomas Orme, M.R.C.S., Gloucester
Greenwell, Baker, M.R.C.S. & L.A.C., London
Harland, Henry, Fletching, Sussex
Harrison, Charles, M.R.C.S. & L.A.C., Lincoln
Hawkes, John, M.R.C.S. & L.A.C., Maidstone
Hepworth, Alfred J. L., M.R.C.S. & L.A.C., Royal Artillery
Jones, Edward, M.R.C.S., Dolgelley
Kitching, John, M.R.C.S., York
M'Conville, John, M.R.C.S.Ed., Glasgow
Manning, Frederick N., M.R.C.S. & L.A.C., York
Marston, Charles H., M.R.C.S. & L.R.C.P. (by exam.), Devizes
Morris, Isaac, M.R.C.S. & L.A.C., Lewes, Sussex
Neatby, Thomas, M.R.C.S. & L.A.C., Barnsley
Park, William, M.R.C.S. & L.A.C., Ulverston
Pechey, William C., M.R.C.S. & L.A.C., Walthamstow
Robertson, Alexander C., Lic. Fac. Phy. & Surg. Glasg., Army
Seaborne, Cleophas W. S., Lic. Fac. Phy. & Surg. Glasg., London
Seabrook, Thomas E. F., M.R.C.S., London
Smith, David, M.R.C.S., Glasgow
Soloman, Alexander, M.R.C.S. & L.M., Calcutta
Spyers, Thomas Charles, M.R.C.S., Weybridge
Stephens, Joseph, L.R.C.P.E., M.R.C.S. & L.A.C., Bayswater
Telford, Thomas, L.R.C.S.Ed., Dublin
Todd, John Markwell, M.R.C.S. & L.A.C., Bognor
Wells, Samuel, Madras
Willett, John, L.A.C., Great Budworth, Cheshire
Young, George E., M.R.C.S., Mechlin, Belgium

The following gentlemen, having previously obtained the degree of Doctor of Medicine, were candidates for Honours, and are placed alphabetically, as follows:—

First Class.

Belinfante, Simon, University College
Stephens, Joseph, Bishops Road, Bayswater

APPOINTMENTS.

*Haviland, Henry J., M.D., unanimously elected Physician to Addenbrooke's Hospital, Cambridge.

Kirkpatrick, J. R., M.B., elected Assistant-Physician to the Lying-in Hospital, Rutland Square, Dublin.

*Lansdown, Francis P., Esq., elected Surgeon to the Bristol General Hospital.

Royal Army. The following appointments have been made:—

Arden, Surgeon W., 14th Light Dragoons, to be Surgeon-Major.
Swettenham, Surgeon W. K., M.D., 5th Foot, to be Surgeon-Major.
Williamson, Staff-Surgeon G., M.D., to be Surgeon-Major.

Royal Navy. The following appointment has been made:—

Brake, William N., Esq., Surgeon, to the *Challenger*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Brand, S. E., Esq., to be Assist.-Surgeon 12th Tower Hamlets R.V.
Cross, R., M.D., to be Assist.-Surg. Queen's (Westminster) R.V.

Fawssett, F., jun., M.D., to be Assistant-Surgeon Cambridgeshire Militia.
Leonard, J., Esq., to be Assist.-Surg. Queen's (Westminster) R.V.
Logan, W., Esq., to be Assistant-Surgeon 2nd Fife R.V.
Moore, O. A., Esq., to be Assistant-Surgeon 1st West Riding R.V.
Reeve, J. F., M.D., to be Surgeon 6th Tower Hamlets R.V.
Ross, F. D., Esq., to be Assistant-Surgeon 2nd Royal Surrey Regiment of Militia.
Sercombe, E., Esq., to be Assistant-Surgeon St. George's R.V.

To be Honorary Assistant-Surgeons:—

Campbell, H., Esq., 4th Argyllshire A.V.
Thomas, B., Esq., 5th Carmarthenshire R.V.
Thomson, T., Esq., 5th Mid Lothian R.V.

BIRTHS.

Mann. On May 3rd, at Manchester, the wife of *Robert Manners Mann, Esq., of a son.

Underhill. On April 21st, at Great Bridge, Tipton, the wife of *Thomas Underhill, Esq., of a daughter.

DEATHS.

*Clark, Henry, Esq., at Bristol, aged 59, on May 10.

Fitton, William H., M.D., F.R.S., at 4, Sussex Gardens, aged 81, on May 13.

Grahame, William D., M.D., at Brighton, aged 40, on May 8.

Innes. On May 9th, at Edinburgh, Margaret C., second daughter of the late James Innes, Esq., Surgeon H.E.I.C.S., Bengal Establishment.

Maclise, William, Esq., Staff-Surgeon, formerly of 90th Light Infantry and 22nd Foot, at Chelsea, aged 41, on May 9.

Sladen, Ramsay, Esq., Physician-General Madras Army, at Madras, aged 78, on April 5.

Queen's College, Belfast. The medical students in attendance have increased since last year from 95 to 116.

University of Oxford. George Rolleston, D.M., Fellow of Pembroke College, and Thomas King Chambers, D.M., Christ Church, have been nominated to the office of Examiners in the Faculty of Medicine of Oxford.

Bequests. Mr. Clarke, late of Beaufoy Terrace, Maida Vale, has left a bequest of £200 to each of the following hospitals:—Charing-cross, King's College, St. Mark's, St. George's, St. Mary's, and the Royal Free.

Death after Using a Turkish Bath. A person is stated to have died lately, in Limerick, from the effects of a Turkish bath. From the account given it is evident, that the immediate cause of death was rupture of a blood-vessel—probably of an aneurism—the rupture being, we may fairly suppose, hastened by the effects of the bath.

Hospital for Sick Children. The anniversary dinner of this institution was held on Wednesday last, at Willis's Rooms, under the presidency of Lord Taunton. About sixty gentlemen dined together. The subscriptions raised in the course of the evening amounted to near £1000. During the nine years in which the hospital has been opened, it has relieved 2662 in-patients and 68,143 out-patients.

Physicians in the United States. According to the *Nashville Medical Journal*, the number of physicians in the United States, amounts to 40,481. In Massachusetts there is one physician to 605 inhabitants; in New York, one to 611; in Pennsylvania, one to 561; in North Carolina, one to 802; in Ohio, one to 465; in Maine, one to 884; and in California, one to 860. These facts may be of interest to recent graduates.

The Army Medical Department in America. Under the direction of some of the leading surgeons of New York the medical and surgical department, which has been sadly neglected, and the hospital department, are being rapidly systematised. The organisations for local charity connected with the various churches have also taken up the matter vigorously, preparing clothes for the troops; and, what is equally important, bandages, lint, medicines, and other things connected with the hospital department.

A Medical Act in America. The Louisiana legislature, through the influence of Dr. J. H. Stevens, has recently passed "an act relative to practitioners of medicine," which forbids any one to practise medicine in in that State, without making an affidavit before a Justice of the Peace, that he has received a degree of Doctor of Medicine from a regularly incorporated medical institution in America or Europe. The affidavit is to be recorded by the parish recorder; any person practising without having made such affidavit, is not permitted to collect fees, and is liable to a penalty of 20 dollars.

Registration in Ireland. The medical practitioners throughout Ireland are greatly dissatisfied with the clause in the Bill for the Registration of Births, Marriages, and Deaths, which requires them to furnish within a limited time certificates of the death of the parties on whom they may have been attending, imposing a penalty in case of neglect, without providing that they shall be paid anything for their trouble. This provision is not in the English Act; and the *Cork Reporter*, which takes up the cause of the doctors, asks, "Why is such a shameful and invidious distinction made?"

Militia Surgeons. The following are the sums actually paid to militia surgeons and civil practitioners for the medical examination of recruits for the Household Brigade and Line, including the recruits for the Indian army, for the years 1857-58, 1858-59, 1859-60. In the first year, the sum was £5,120 9s. 6d., of which £2,036 3s. 6d. was for militia surgeons, and £3,084 6s. for civil practitioners. In the second year, the sum was £5,038 15s., of which £1,984 8s. 6d. was for militia surgeons, and £3,054 6s. 6d. for civil practitioners. In the third year, £3,400 4s.; £1,280 7s. 6d. being for militia surgeons, and £2,119 16s. 6d. for civil practitioners.

Medical Vacancies. The following appointments are vacant:—Physician to the Eastern Dispensary, Bath; Assistant-Physician to the Middlesex Hospital; Consulting Surgeon to the Kent and Canterbury Hospital; Surgeon to the St. Augustine County Prisons at Canterbury; Surgeon to the Islington Dispensary; Resident Medical Officer to the Metropolitan Free Hospital; Surgeon to the Broadclyst District, Devonshire. At the Royal Portsmouth, Portsea, and Gosport Hospital, there are vacancies for ten medical officers, eight for the borough of Portsmouth, and two for the town of Gosport and parish of Alverstoke.

British Museum. The total number of additions made to the departments of zoology, geology, and mineralogy, during the past year, is above 45,250. Professor Owen observes, "Present knowledge of the manifold works of nature, and present opportunities of acquiring the rarer examples thereof, do not support the expectation that the need of increased space for their public exhibition will become less in a few years; the vast proportion of the unknown to be known in nature, and the diversity and extent of the unexplored parts of the world, rather impress the belief that future additions will accrue to the natural history departments in an equal or increasing ratio for some years to come."

University of London. On Wednesday afternoon, a meeting was held at Burlington House, for the presentation for degrees and honours. Earl Granville, the Chancellor of the University, presided. After the presentations, the Chairman addressed the meeting. In the course of his remarks, speaking on the subject of parliamentary representation, he said that, in the distribution of the four vacant seats in the House of Commons, an endeavour was to be made to assign one of them to the universities of Scotland. If such a privilege were conceded to them, he had no doubt that they would send a worthy representative; but, as these were English seats that had to be disposed of, he could not agree in the claim that had been put forward; and certainly the University of London had a prior claim, which it would be becoming for it to press, if the other claim were persevered in.

Middle Class Asylums. It was urged at the last meeting of the Social Science Association by one of the best practical authorities upon this topic, Mr. Samuel Gaskell, now Commissioner in Lunacy, that most insufficient means of help are offered to the labouring and middle classes when attacked or threatened with disease of the mind. The law has already done much for the insane pauper, but in England and Wales for those who are not paupers, there is lamentable want of proper means of care and treatment. Mr. Gaskell believes that for the support of such asylums adequate funds could be derived from the patients, if the land and buildings were once furnished by the public, and there are few ways in which expenditure would lead to as much return of public good.

St. Mary Hall, Oxford. The Trustees of the Scholarships founded in this University by Thomas Dyke, formerly of Kingston, in the county of Somerset, Doctor of Medicine, are desirous of appointing a scholar therein. Candidates must be persons born in one of the counties of Somerset, Devon, and Cornwall, or who, for the three years ending with the 31st day of December last, shall have been educated at any school or schools in those counties, or any or either of them, provided they have not attained the age of 20 years, or exceeded the fourth term from that of their matriculation inclusive, and provided it shall appear, to the satisfaction of the trustees, that they are in need of assistance to support them at the University. The Scholarship amounts to £45 per annum, and may be tenable for four years from the day of appointment inclusive, subject, as to residence within the Hall, to the regulations of the Hall in force for the time being with regard to the Undergraduate members thereof. Persons desirous of becoming candidates are required to send to James Randolph, of Milverton, in the county of Somerset.

A Constitutional Question. Muncherjee Beramjee Colah, a Parsee, a native of Bombay, M.R.C.S.E., came to London last June, with the especial object of competing for an appointment in Her Majesty's Indian medical service. In November it was announced that, in consequence of the amalgamation of the Indian and British forces, there would in future only be one examination for both services, and that out of the successful candidates a certain number would be appointed to the Indian forces; but in March he learned that, as natives of India of native parentage are deemed unfit for entering Her Majesty's general medical service, on account of their supposed physical inability to perform active duty in cold climates, such as Canada, he will not be allowed to offer himself for examination. He has urged that the Parsees of the present day live in all parts—New York, London, Liverpool, Manchester—and for fifty years have borne the winters of Canton and Shanghai, and that during the past winter he has been out in the performance of medical duties at all hours, night and day. But the War Secretary has felt obliged to reply that the opinion of those best competent to advise him on the subject confirms his own previous impression, as to the constitutional unfitness of the native and mixed races of India and other tropical countries to sustain for any length of time the climate of our northern regions. [Our readers may remember that this is a case similar to one to which we have already specially alluded in the Journal. Ed.]

University of Cambridge. The Syndicate appointed by the Senate in March last recommend (amongst other things) the following alterations should be made in the stipends of Professors:—"They recommend that the fee of £7 which has hitherto been paid by all candidates for the degree of M.B. on keeping their Act to the Regius Professor of Physic be discontinued; that a fee of £3 3s. be paid to the Professor by each student when his name is sent in for the first examination for the M.B. degree, and that a fee not exceeding £3 3s. be paid by every student who attends one or more courses of the Professor's lectures; and that, in lieu of the fee of £11 11s. heretofore paid to the Professor by candidates for the degree of M.D. on keeping their Act, a fee of £10 10s. be paid at that time to the Professor. As compensation for the loss which would result to the Regius Professor of Physic by the adoption of these rules, the Syndicate recommend that the sum of £50 per annum be paid to the Professor from the University chest. The Syndicate further recommend that the present Professor of Botany, Anatomy, Chemistry, and Mineralogy, and the Jacksonian Professor of Natural Philosophy, should severally receive from the University chest, so long as they continue to hold their respective Professorships, such a sum as will augment their endowment stipends to £300 per annum each, provided that they severally declare in writing to the Vice-Chancellor their acceptance of the statute for the said Professorships, confirmed by the Queen in Council, April 16, 1861; it being at the same time declared to be the ordinary duty of the holders of the said Professorships to reside within the precincts of the University for eighteen weeks in every year between the 1st of October and the end of the following Easter Term."

Vital Statistics of Scotland. The Scotch stand the educational test well; 88·6 per cent. of the men who married, and 77·2 of the women, signed their names. In England, in the same year, the proportions were 70·5 and 58·8. The deaths in the year (a year of more than average mortality) were only 206 in 10,000 persons, showing Scotland to be one of the very healthiest countries on the face of the globe. The annual percentage of deaths to population is stated thus:—Scotland, 2·06; England, 2·21; France, 2·36; Belgium, 2·52; Holland, 2·76; Prussia, 2·83; Spain, 2·85; Sardinia, 2·91. Some points of interest in relation to disease and mortality are noticed. Including the secondary diseases, twice as many women died from childbirth as in England. This is thought not much attributable to distance from medical aid, and the question is raised whether it is not owing to certain anatomical conformations. It may seem strange to speak of Scotland as a place for the consumptive, but Argyll and the Western Isles enjoy a remarkable immunity from consumption; those islands have a mild winter climate, with a more humid atmosphere than the mainland when the arid easterly winds prevail in spring. Of the influence of weather we learn that in Scotland, with the single exception of diarrhœal complaints, all the ordinary epidemics of the country increase with the increase of cold, and it is the cold that kills. The diseases induced by heat seldom prevail anywhere until the mean monthly temperature rises above 60 deg., and that is a rare occurrence in Scotland.

University College, London. The distribution of prizes in the faculty of medicine, took place on Monday. In the absence of the Right Hon. W. F. Cowper, M.P., the chair was taken by Mr. Grote. The Dean of the Faculty, Professor Erichsen, read a report, from which it appeared that the condition of the medical school was in every way satisfactory. The number of pupils during the past session was 192; of these 54 were new entries. The conduct of the students had been most exemplary. The prizes were awarded and presented by the chairman in the following order:—*General Proficiency: Longridge Prize of* £40, August 1860—William J. Smith, of West Heath, Hants.—*Filliter Exhibition in Pathological Anatomy:* £30—Henry C. Bastian, of Falmouth.—*Liston Clinical Gold Medal* (*Surgery*).—William Hickman, of London.—*Surgery: Gold Medal:* John H. Hutchinson, of Catterick. *First Silver Medal:* Edwin First, of South Molton. *Second Silver Medal:* William H. Brotherton, of London. *Certificates of Honour:* 4. Henry Sutcliffe, of Heptonstall; 5 (equal). Thomas Griffiths, of Dryslwyn-fawr; David B. Thomas, of Newcastle-Emlyn; 6. T. Starkey Smith, of Warrington; 7 (equal). Thomas W. Bogg, of Louth; William T. Watson, of Tottenham; 8. Albert Southey, of Hampstead; 9. Edmund Venning, of Redruth; 10. Athenedore de Negri, of London.—*Anatomy: Senior Class—Gold Medal:* William H. Griffin, of Banbury. *First Silver Medal:* William Saul, of Banbury. *Second Silver Medal:* William P. Bingley, of Sheffield. *Certificates of Honour:* 4. John Foster, of Huntingdon; 5. Edward C. Bury, of Mitchelstown, Ireland; 6. Alexander Bottle, of Dover. *Junior Class—Silver Medal:* Herbert Everitt, of Limpenhoe, Norfolk. *Certificates of Honour:* 2. Charles S. N. Atkinson, of Norwich; 3. Samuel Mills, of Huddersfield; 4. Charles Read, of Falmouth.—*Anatomy and Physiology: Gold Medal:* William H. Griffin. *First Silver Medal:* George Oliver, of Stockton-on-Tees. *Second Silver Medal:* John Harman, of Canterbury. *Certificates of Honour:* 4. William Saul; 5 (equal). Palemon Best, of St. Ives, Cornwall; Alexander Bruce, of London; 6. William P. Rawlins, of Kentish Town.—*Chemistry: Gold Medal:* Thomas G. P. Hallett, of Martock. *First Silver Medal:* George E. Walker, of Wigan. *Second Silver Medal:* Julian A. M. Evans, of Pinner. *Certificates of Honour:* 4 (equal). William M. Rogers, of Mauritius; George W. Knox, of London; William P. Colchester, of Forest Hill; Edward F. Teschemacher, of Highbury; 5. William Spooner, of Southampton.—*Comparative Anatomy: Gold Medal:* Alexander Bruce.—*Medicine: Gold Medal:* John H. Hutchinson. *First Silver Medal:* John Dustan, of Jersey. *Second Silver Medal:* Thomas W. Bogg. *Certificates of Honour:* 4. Thomas Griffiths; 5. Edward T. Tibbits, of London; 6. T. S. Smith.

King's College Hospital. The anniversary dinner of this institution took place at the Great Hall, Lincoln's Inn, on Wednesday evening last. The chair was occupied by Lord Chelmsford, and there were about three hundred present. The Chairman, in proposing "Prosperity to King's College Hospital", stated that, little more than twenty years ago, King's College Hospital was established with the view of affording hospital accommodation to the densely inhabited district between Holborn and the Strand, the population of which in 1851 was estimated at 400,000, and which until 1839 was entirely dependent for medical advice and assistance upon a single dispensary. In 1840, the patients amounted to 4,834; but the number during the past year has reached 33,153. Since the establishment of the institution, 462,685 patients have been admitted to the benefits of the charity, of whom 26,464 were in-patients, 426,991 out-patients, and 9,234 poor married women attended in their confinement at their own homes. About 150 beds are in constant use, accommodating, on an average, between 1,400 and 1,500 patients annually. Of the in-patients, fully two-thirds were admitted free; while out of the half a million out-patients relieved since the establishment of the hospital, not more than 10,000 have presented governors' letters. This vast amount of relief afforded to sickness and suffering was administered at a cost of between £6,000 and £7,000 a-year; and the hospital, being unendowed, was entirely dependent for support on the annual donations of its governors and the voluntary contributions and bequests of benevolent persons. The hospital, he further observed, is an important medical school, and had afforded instruction to upwards of three thousand members of the profession. The nursing department, also, was admirably conducted. The nurses were all educated in St. John's House; they were of a totally different class to the persons who had been in past times alone thought fit for this duty. They were young, well instructed, and active, and understood their duties. They were superintended by ladies of birth and education, who lived in the hospital, and who devoted themselves entirely to this duty. In the course of the evening, subscriptions to the amount of above £3000 were announced, £1750 of which had been promised by persons unable to be present at the dinner.

Death of Dr. Fitton. We have to announce the death of one of the most early founders of the British School of Geology, at the advanced age of eighty-two, and in the possession of the highest scientific honours. For the last twenty years, he had retired from the active part which he once took in the scientific world. His early labours, commencing more than fifty years ago, on the geology of Hastings and its neighbourhood, and his general works on the strata intervening between the chalk and oolite in the south-east of England, although published at an early period in the history of the science, speedily raised him to an European reputation. In 1827 he was elected to the proud position of President of the Geological Society. His labours, although confined to subjects necessarily recondite and unpopular with the great mass of the public, were the source of much valuable information to the practical members of the science which now deplores his loss. In the year 1852 he was presented with the Wollaston Palladium medal by the Geological Society. As a contemporary of William Smith, Cuvier, and Humboldt, his labours were recognised universally on the Continent. As Buckland, speaking of Fitton and his contemporaries, graphically stated, "It has been our high privilege, which our successors cannot enjoy, to be the pioneers of a great and comprehensive master-science; and, wherever we have pushed forward our original discoveries, these discoveries will have indelibly inscribed our names on the annals of the physical history of the globe."

Military Enthusiasm in America. Within the past week New York has been converted into a vast military camp. The preparations for war during this short period are incredible in extent and completeness. Every class, profession, and trade, is animated by one impulse, viz. effective preparation for the support of government. The lawyers even have united to form a regiment. The medical profession contributes liberally to the appointments of the staff of officers of the several regiments. Among the prominent members of our profession who have already enlisted we may mention Prof. J. C. Dalton, Surgeon to the 7th Regiment, and Dr. J. W. S. Gouley, Surgeon to the First Regiment of Zouaves. Indeed, there is reason to fear that our hospitals and public charities will be deprived of many of their resident medical officers, so great is the anxiety to enlist. The commissioners of public charities and correction having consented to reserve the places of the medical staff who might desire to enter the army, several have availed themselves of the opportunity and joined the the volunteer regiments. The enlistment of Dr. S. Burnett Tuthill, as surgeon to the reinforcement of the Seventh Regiment, forcibly illustrates the spirit of the medical profession, and of every citizen. He was waked at an early hour in the morning by a messenger from the officer of the regiment, requesting his enlistment and immediate presence in their ranks. He instantly, and without previous reflection, obeyed the summons, and departed immediately to the seat of war. (*American Med. Times.*)

The Ethnological Society. The annual meeting of the Ethnological Society was held on Wednesday afternoon, at 4, St. Martin's Place. The chair was occupied by Mr. John Crawfurd, F.R.S., the President.

POOR-LAW MEDICAL REFORM.

At a Public Meeting of the Metropolitan Poor-law Medical Officers, held May 10th, 1861, at the Rooms of the Royal Medical Benevolent College, 37, Soho Square, it was unanimously resolved to adopt, as the embodiment of their collective opinions, the following statement (here condensed), submitted to them by their Committee. It was also further resolved, that all the Union medical officers should, through the several weekly medical journals, be solicited to forward, *within the course of one week*, to the Hon. Secretary, Dr. Robert Fowler, 145, Bishopsgate Street Without, E.C., any facts within their respective experience bearing on the suggestions of such statement, with a view to the said facts being laid as evidence before the Parliamentary Poor-law Committee.

The Committee of the Metropolitan Poor-law Medical Officers, having maturely considered the subject of Poor-law Medical Relief, in so far as it affects the position of the medical officers and the interests of the sick poor, are of opinion that the present system of administration of medical relief requires amendment.

They submit the following suggestions as indicating the defects of the system, and the means for remedying the same; and recommend that evidence of as comprehensive a nature as possible be solicited from the Poor-law medical officers, having reference to such suggestions, which evidence may be ultimately submitted to the Parliamentary Poor-law Committee:—

A. *As Regards the Sick Poor.* 1. That it is a source of injury to the poor, and a false economy to the ratepayers, for Poor-law Guardians to make cheapness a ruling guide in their election of medical officer.

2. That, in order to insure to the sick poor the full benefit of medical aid, the appointment of the Poor-law medical officer should be, *in all cases*, made permanent.

3. That, for the same object, the medical officer of a district should have the power, in common with the medical officer of a workhouse, of ordering, in writing, whatever necessary diet or clothing he may think required for any pauper under his care, and that it should be the duty of the relieving-officer to obey such order.

4. That, in some rural districts, the distance between the poor and the relieving officer, or between the relieving officer and the medical officer, is too great; thereby causing the poor to travel an unnecessarily long distance for medical aid. The remedies for this are two, viz., 1. Either to extend the power of giving orders to other parochial officials besides the relieving officer; 2. Or by arranging that the relieving officer shall live, *whenever such is practicable*, within one mile of the residence of the medical officer.

B. *As Regards the Medical Officer.* 1. In common fairness to the medical officer, his appointment should be made, *in all cases*, permanent.

2. That the present system of remuneration of the medical officer is without any uniformity, equality, or any definite principle; some officers being paid by a fixed salary and extras, some by a fixed salary without extras, and a small number by the case; but the great majority are paid by a fixed salary, which usually bears no relative proportion to the amount of work performed. That the mode of payment by a gross fixed salary admits of the infliction of a great injustice on the medical officer, by the indiscriminate issue of orders which takes place.

3. That, in the great majority of instances the remuneration of the medical officer is inadequate for the services performed.

4. That the only just and equitable mode of payment is by a certain fixed sum per case, in accordance with the recommendation of the Poor-law Commissioners in their minute dated June 6th, 1839.

5. That, at a minimum computation, no less a sum than 2s. 6d. per case in the metropolis, and than 5s. in the provinces, can compensate the medical officer for his services.

6. That the medical officer of a workhouse should be paid to the same extent, both with reference to salary and to vaccination fees and other extras, as the district medical officer.

7. That the list of "operations and services" detailed in Art. 177 of the General Council Order requires augmentation.

8. That the medical officers, in consideration of the vast and important duties performed by them, the discomfort and difficulty, and the great personal risk of life to which the performance of those duties exposes them, together with the minimum remuneration which they now seek, are fairly entitled to a superannuation allowance, in common with the members of the civil service.

9. That, in order to facilitate the carrying out of the foregoing suggestions and recommendations, it is highly necessary that the powers of the Poor-law Board be consolidated and extended, especially those relating to the Poor-law medical officers and the sick poor.

Varieties.

Meteorology and Illumination. It appears that the difference in the illuminating power of the same gas may vary 20 per cent., when tested at the highest and at the lowest points of the barometrical range in this country, from the effect of the rarefaction of the air alone, without taking into consideration the different densities of the gas at the opposite degrees of pressure.

A New Food. "Hippopotami," writes Dr. Livingstone, "are good food, half beef and half pork, and lots of fat, that serves as butter. By the way, our good friend, Professor Owen, and the gastronomic committee, will stand very much in their own light if the she-giraffes die a natural death. If they praised the eland so, a dinner off she-giraffe will leave them all lying on their backs."

Mortality of Montreal. The rate of mortality of Montreal, in 1860, was 1 in 32 of its inhabitants; this is a reduction of 25 per cent. in fourteen years; the death-rate being. in 1846, 1 to every 23·60. During that period the population of the city has doubled—thus proving, contrary to our City Inspector, that a city may improve in health, though its population rapidly increases.

The Price of a Broken Collar-Bone. Dr. Hingston, of Montreal, recently recovered 600 dollars from the corporation of that city for a fracture of his clavicle, received in a fall from his horse, owing to a defective bridge. This sum he has generously appropriated as follows: 50 dollars to the Natural History Society; 50 dollars to the Mechanics' Institute; and the balance to the establishment of a Free Hospital for Children.

American Army Medical Pay. The annual salary of the Surgeon-General is three thousand dollars, with fuel and quarters; monthly pay of surgeons of ten years service in that grade, two hundred dollars; a surgeon of less time service, one hundred and sixty-two dollars; assistant-surgeon of ten years service, one hundred and fifty dollars; assistant-surgeon of five years service, one hundred and thirty dollars; and four assistants of less than five years service, one hundred and ten dollars.

A Savoury Food. An eloquent Frenchman has observed: "This much is certain, that the oyster supplies an aliment which unites all the properties that are most precious for food. Its flesh is sweet, fine, and delicate;

it has savour enough to please the taste, not enough to excite or cloy it, or reach that frightful limit of the gastronomer—*too much!* It lends itself, moreover, through a quality peculiar to it, to gastric and intestinal absorption. Mingling easily with the other aliments, and assimilating itself without difficulty with the juices of the stomach, it assists the digestive functions. Excepting bread, there is no alimentary substance that does not at one time or another cause indigestion, but oysters never!"

A Climbing Fish. At the last meeting of the Boston Society of Natural History, held Jan. 2nd, Dr. Bryant presented, in the name of Mr. Henry Morse, two specimens of the siluroid genusi *Callichthys*, a fish from Surinam, which is said to climb trees. Professor Agassiz and Dr. Pickering mentioned the genera *periophthalmus*, *anabas*, and *gobiesox*, which have the property of existing a considerable time out of water, and might ascend the trunks of trees inclining into the water. Dr. Pickering observed that he had found *gobiesox* in Peru forty feet above the water on shore, and had seen *periophthalmus* hopping about over the mud in the manner of frogs.

The Detection of Alum in Bread. This problem is one of far more difficulty than is generally imagined, and it is, doubtless, to this fact that the discordant results obtained by the different analysts are to be attributed; one stating that out of sixty-four samples of bread purchased at various shops in poor neighbourhoods at the East of London, where, if anywhere, adulteration would be practised in the most barefaced manner, not a single one was found to contain alum; whilst another analyst, with equal positiveness, mentions the name of a baker who is, in his opinion, almost the only person in a large district at the West End of London who sells unadulterated bread, and proceeds to state that more than 87 per cent. of the bread in London is adulterated. My attention was first drawn to this subject by the fact that a sample of bread which was known to be entirely free from adulteration had been pronounced by a somewhat experienced analyst as being largely adulterated with alum. (*Mr. Crookes.*)

Vaccination in China. Vaccination was introduced among the Chinese into Canton, by Dr. Pearson, about the year 1805. Owing to the persevering efforts of this gentleman, continued through many years, the inestimable blessings of this preventative are fully known to the Chinese, and his name is worthy of little less honour than that of the immortal Jenner, who first made it known to the world. Small-pox is almost an annual epidemic in China, and, without the aid of government or any public institutions, it is not strange that vaccination is neglected by multitudes in so vast a population. Those who practise vaccination are not able to preserve the virus, and they depend for fresh supplies brought from England. It was with the design of supplying these deficiencies that the department was established; and it is hoped that, while gratuitous vaccination is offered to the poor, the hospital will be a source from which to supply virus at all times to all parts of the south of China. A tract on the subject has been prepared and printed, in which directions are given for preserving the scab and vaccination from it. This is one of the easiest modes of preserving the virus in a warm climate, but is not known to the Chinese. (*Dr. Kerr.*)

Pushing a Periwinkle to its utmost Possibilities. The student of history follows with intense interest the march of a conqueror or the migrations of a nation. The traveller traces with almost breathless delight every step of the progress of some mighty hero of ancient days. I have had my share of the pleasure when tracking the course of Alexander and his armies in Pisidia, and determining mile by mile the route of Manlius through Milyas, on ground to the modern geographer wholly new. Yet, absurd as it may seem to those who have not thought of such things before, there is a deeper interest in the march of a periwinkle and the progress of a limpet. It is easier to understand how the son of Philip made his way safely through the sea on his famous march from Phaselis, than to comprehend how the larva of a *patella* crossed the fathomless gulf between Finmark and Greenland. It is a strong saying, but not without a meaning, that the existence of Alexander may have been determined by the migration of a shell-fish. If I am right in my interpretation of the reason why we find the same species of periwinkle in Greenland and along the coast of Labrador that lives now on the shores of Nordland and Finmark—in the unravelling of the cause and means of its wanderings we acquire a clue to the origin of the peculiar conformation of the world as it is, and to the disposition of those geographical arrangements upon which the development of nations and character of men in a great measure depend. (*E. Forbes.*)

The Temperature of the Earth's Crust. At a recent meeting of the Manchester Literary and Philosophical Society a paper was read by Mr. W. Fairbairn, LL.D., "On the Temperature of the Earth's Crust, as exhibited by Thermometrical Observations obtained during the sinking of the Deep Mine at Dukinfield." He says:—"During the prosecution of researches on the conductivity and fusion of various substances, an opportunity occurred of ascertaining by direct experiments, under favourable circumstances, the increase of temperature in the crust of the earth. This was obtained by means of thermometers placed in bore-holes, at various depths, during the sinking of one of the deepest mines in England—namely, the coal mine belonging to Mr. F. D. Astley, at Dukinfield, which has been sunk to a depth of 700 yards. The increase of temperature in descending shown by these observations is irregular; nor is this to be wondered at if we consider the difficulties of the inquiry, and the resources of error in assuming the temperature of a single bore-hole as the mean temperature of the stratum. At the same time, it is not probable that the temperature in the mine-shaft influenced the results. The rate of increase has been shown in previous experiments to be directly as the depth, and this is confirmed by these experiments. The amount of increase is from 51 deg. F. to 57¾ deg., as the depth increases from 5⅔ deg. to 231 yards, or 1 deg. in 99 feet; but, in this case, the higher temperature is not very accurately determined. From 231 to 685 yards, the temperature increases from 57¾ deg. F. to 75½ deg. This is a mean increase of 1 deg. in 76·8 feet, which does not widely differ from the results of other observers. Walferdin and Arago found an increase of 1 deg. in 59 feet; at Rehme, in an Artesian well, 760 yards deep, the increase was 1 deg. in 54·7 feet; De La Rive and Marcet found an increase of 1 deg. in 51 feet at Geneva. Other experiments have given 1 deg. in 71 feet. The observations are affected by the varying conductivity of the rocks, and by the percolation of water." The author has exhibited upon a diagram, in which the ordinates are depths and the abscissæ temperatures, the results obtained between the depths of 231 and 717 yards. The strata of the mine are also shown in section. Additional to these, the author gives a table of similar results in another pit at the same colliery, taken between the depths of 167½ and 467 yards, and showing an increase of temperature of 1 deg. in 106 feet of descent. Assuming, as an hypothesis, that the law thus found for a depth of 790 yards continues to operate at greater depths, we arrive at the conclusion that at 2½ miles from the surface a temperature of 212 deg. would be reached, and at 40 miles a temperature of 3,000 deg., which we may suppose sufficient to melt the hardest rock.

ABUSE OF ABSINTHE BY THE FRENCH. The ravages committed in the army and colonists of Algeria by the abuse of this exciting liquor have long been subject of the most earnest reports from the various administrators of the colony. In 1857, Marshal Randon, by a peremptory order, forbade the "mercantiles" to follow the army in its expedition against the Kabyles. The consequence of the order became visible at once in the slackening of the manufacture of absinthe. The most satisfactory results in point of military hygiene were obtained during this campaign, but as soon as the expedition returned to Algiers the old symptoms reappeared, and the hospitals became once more crowded with blear-eyed idiots waiting to be conveyed home to their friends. The detestable adulteration of the liquor by sulphate of copper is so well-known in the army that it is called familiarly *infusion de gros sous*, and yet even this knowledge is not sufficient to defer the soldiers from seeking the forgetfulness it procures. At the beginning of last year a great sensation was produced in Paris by the mortality which carried off in a short time, with every symptom of poisoning, a considerable number of men belonging to the first regiment of dragoons. Every research has been made to discover the cause, when the doctors determined to have the absinthe of the canteens submitted to examination. The presence of a large proportion of sulphate of copper was detected. By order of the colonel, and with solemn ceremony, in presence of the whole troop, the casks containing the liquid are stove in, and their contents swept into the gutter. Health was restored after this execution, which served as a lesson both to the consumer and the manufacturer—for the latter is said to substitute chloride of antimony, a far more dangerous poison, and much more difficult of detection than the sulphate of copper.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......	Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.
TUESDAY.	Guy's, 1½ P.M.—Westminster, 2 P.M.
WEDNESDAY...	St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.
THURSDAY.....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.
FRIDAY.	Westminster Ophthalmic, 1·30 P.M.
SATURDAY.....	St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.	Pathological, 8 P.M.—Statistical.
WEDNESDAY.	Society of Arts, 8 P.M.—Geological.
FRIDAY.	Linnæan (Anniversary).—Royal Institution.
SATURDAY.	Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MAY 11TH, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week....................	Boys .. 972 Girls .. 876	1848	1240
Average of corresponding weeks 1851-60		1655	1202

Barometer:
Highest (Sun.) 30.149; lowest (Sat.) 29.441; mean 29.739.

Thermometer:
Highest in sun—extremes (Th.) 103.8 degs.; (Sat.) 50 degs.
In shade—highest (Th.) 56.2 degrees; lowest (Th.) 33.4 degrees.
Mean—43.4 degrees; difference from mean of 43 yrs.—8.3 degs.
Range—during week, 22.8 degrees; mean daily, 15.3 degrees.

Mean humidity of air (*saturation* = 100), 79.
Mean direction of wind, N.N.E.—Rain in inches, 1.13.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

A CURE FOR HOMŒOPATHIC CONSULTATIONS.—A correspondent writes, that he and his fellow-townsmen have adopted the following mode of meeting this irregular practice. "An eminent surgeon was warned, that unless he was willing to discontinue meeting homœopaths, the medical men of this neighbourhood would cease to recommend him in consultation. He took time to consider, and declined to comply. I do not think he has been in our district since. If such a plan were generally followed, we should hear no more of such disgraceful conduct."

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—In returning thanks to the Governors for unanimously electing him to the office of Physician at this Hospital, Dr. Haviland stated, as the result of his canvass, that he could securely reckon upon the support of four hundred out of the four hundred and fifty Governors who are entitled to vote. Thus Dr. Bayes, the homœopath, who had announced his intention of contesting the election, has not gained much by his move. On the contrary, by endeavouring to thrust himself into a position he is totally unfitted to occupy, he must have opened the eyes even of his most ardent supporters, who, it is to be hoped, will for the future seek medical aid from a purer and more reliable source.

PRESCRIBING DRUGGISTS.—A correspondent writes: "A retired druggist buys an estate, and comes to reside in the country; and, having opened a shop or surgery, without a letter indicating what he professes, he presumes to prescribe for all cases of disease, both amongst the poor, and the opulent farmers (some of whom like cheap physic). You very justly remark, that our Registrar has full power to persecute the legitimate practitioner, but none whatever to *protect* him; and, if we must wait until physical science is better known amongst the million, we should have to live until two or three generations had passed away, before these things would be corrected from that cause."

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, May 1861.

COMMUNICATIONS have been received from:—Mr. JONATHAN HUTCHINSON; Dr. W. BUDD; Dr. WADHAM; Rev. J. M'BEAN; THE SECRETARY OF THE ROYAL MEDICAL BENEVOLENT COLLEGE; Dr. J. M. BRYAN; Mr. A. FLEISCHMANN; THE SECRETARY OF THE COLLEGE OF DENTISTS; Dr. DAY; Dr. SKINNER; Mr. J. J. MURRAY; Dr. H. WEBER; Dr. FOWLER; Mr. P. MARTIN; Mr. A. B. STEELE; Mr. WHITWELL; Mr. C. H. ROPER; Dr, MUNROE; Mr. T. O'CONNOR; Mr. C. SHAW; Dr. JAMES RUSSELL; Mr. GAY; Mr. WEBBER; and Dr. WHYTEHEAD.

BOOKS RECEIVED.

1. The Roll of the Royal College of Physicians of London; compiled from the Annals of the College, and from other Authentic Sources. By William Munk, M.D. Vol. I. 1518 to 1700. London: 1861.

Clinical Records
OF
THE LOCK HOSPITAL.

BY

HENRY LEE, Esq., F.R.C.S.,

SURGEON TO THE HOSPITAL.

II.—Lymphatic Absorption.

In a clinical lecture delivered by me at the Lock Hospital in 1853, and published in the Association Medical Journal for the following year, the following general observations on the subject of lymphatic absorption occur.

"If we reflect upon the different ways in which foreign substances can be taken into the living body, we shall find that every such way is furnished with certain sentinels or guards which oppose the entrance of materials which, if admitted, would prove injurious. Whenever any irritating matters are applied to the skin, which might, by being absorbed, become injurious to the system, I need scarcely say how the delicate sense of touch reminds us of what is going on, and urges us to get rid of the offending material. This is a sense common to the whole body. But the parts through which foreign matters are usually taken into the system are guarded in an especial manner. Thus, in addition to the sense of touch, we see the mouth guarded by the sense of smell and that of taste: three out of five senses concentrated around the opening by which the food enters into the system; and one at least of the other two always ready to assist in affording information of its nature. If we trace the food onward, we find that it has to pass the double row of teeth, which are acutely sensible to the presence of any hard particles which may have become accidentally mixed with the food. Should any fresh flavour be produced in the process of mastication, there are the means provided for appreciating it as the food passes through the posterior fauces. The stomach we find ready, in its turn, to reject that which is injurious; and, throughout the alimentary canal, there is an apparatus composed of a multitude of different parts, all combining to hurry on and eliminate from the system any materials which, if left, would be detrimental to it."

Now, the lymphatics distributed over the body, equally with the lacteals coming from the intestines, convey fluids to the general circulation, to be again used for the purposes of nutrition and secretion. The materials which the lymphatics take up have as much to be assimilated as animal matter taken fresh into the stomach. The bone, the tendon, the muscle, the nerve, which are thus removed, can no longer be recognised as such after they have been acted upon by the absorbents. All the different tissues that undergo this process form a single fluid, which ultimately becomes a part of the general circulating mass; and they can then in no way be distinguished from similar products derived from the process of ordinary digestion. The action which converts foreign animal matter into blood, and that which converts parts of the living body into blood by the agency of the absorbents, are then analogous; and they agree in having the very remarkable property of converting into harmless agents some substances which, when introduced in any other way, act as poisons upon the system. It has been shown by the Abbé Fontana, that the poison of the viper, when introduced into the stomach, undergoes some change which prevents its poisonous effects upon the system. It has also been shown by two French physiologists, that the same thing happens with regard to the Woorara poison; and we have it upon no less authority than that of Sir B. Brodie, that opium may be digested in the stomachs of some animals, and that in that process its poisonous qualities are destroyed. "I have injected", says Sir B. Brodie, "a strong watery solution of opium into the stomach of a rabbit; but no poisonous effect was produced, although a similar solution, injected into the cellular membrane, occasions stupefaction and death."

If, then, we find the lacteals so carefully guarded lest any deleterious matter should find its way through them into the general circulation, it is not surprising that the more generally distributed lymphatic system should be provided with similar means of rejecting that which would be injurious. This power is illustrated in a very remarkable way in some forms of venereal disease, and especially in that form in which the syphilitic poison is taken up as such by the lymphatics of an infected part. The poison thus introduced into the lymphatic system may produce its peculiar and characteristic effect upon any part of the channels through which it passes, between the part originally affected and the first absorbent gland that it meets. In any part of this course the poison may be arrested, and may there produce a fresh syphilitic ulcer; and that the absorbent glands themselves, into which the lymphatics first empty their contents, may become similarly affected, we have daily proof from the secretions of those glands being inoculable so as to reproduce the disease.

Up to this point, then, we have unequivocal evidence of the presence of the syphilitic poison, and of its power of contaminating fresh parts. Beyond this, the poison can no longer be traced. The fluids in which it was before contained now neither possess the power of irritating the vessels through which they pass, nor, when extravasated from these vessels, of infecting other structures. Here, then, some wonderful change is produced. The specific characters of the poison can no longer be detected either by its morbid effects or by inoculation. Hunter noticed this circumstance. He says, "We never find the lymphatic vessels or glands that are second in order affected." And he remarks that, when the disease has been contracted from a cut upon the finger, he has seen the bubo come on a little above the bend of the arm, upon the inside of the biceps muscle. In such instances, no bubo has formed in the armpit, the most common place for glands to be affected by absorption.

Neither observation nor experiment, then, afford any proof that the syphilitic virus is conveyed, as such, through the absorbent glands; all the direct evidence which we have points to an opposite conclusion. The particles in which the poison resides here undergo some change, become perhaps disintegrated; and in that process the existence of the poison appears to cease.

The evidence upon which it has been assumed that the syphilitic poison enters the system through the absorbent vessels must, therefore, be regarded as most inconclusive. Arrived at the first lymphatic gland which it meets, and there undergoing some change, it becomes incapable any longer of producing, either locally or constitutionally, its specific effects; and we cannot therefore admit that this is the way in which the system becomes infected.

When syphilitic matter is conveyed, as such, along an absorbent vessel, it is very generally arrested at the first lymphatic gland that it meets with, and here reproduces its specific and peculiar action—the formation of pus, which is again inoculable. Now, suppuration of the inguinal glands may doubtless occur in every stage of syphilis, as it may in patients whose diseases are not syphilitic; but the peculiar form of suppuration above described—viz., that which furnishes an inoculable pus—is peculiar and characteristic. The primary disease which produces this does not give rise to constitutional syphilis. Cases are from time to time recorded in the journals in which secondary syphilis has followed a suppurating bubo.* No one would deny the existence of such cases, or maintain for a moment that suppuration in an inguinal gland (which may arise from a great variety of causes) is any *preventive* against constitutional disease; but, nevertheless, I am bold to say that, where a primary syphilitic sore has been directly followed by a suppurating bubo producing an inoculable pus, that disease will not be followed by secondary symptoms.

During the year 1853, I collected together and arranged in a tabular form, forty-nine consecutive cases of suppurating bubo. Of these, five only are recorded as having been accompanied or followed by any secondary affection.

In one of these five, there was a distinct history of previous disease, both primary and secondary. In another, the cervical glands were enlarged, and the suppuration in the groin may, therefore, probably have been of a strumous character. In two cases, the secondary eruption was tubercular; an affection most obstinate in its nature, and most liable to recur after having once disappeared, and comparatively seldom occurring as the first symptom of cutaneous disease. The suppuration of the lymphatic glands in these instances, then, I regarded in all probability, like that in the first of the five cases, as the result of some previous syphilitic infection, or of some co-existing non-specific disease. This analysis would thus leave only one case out of forty-nine in which a suppurating bubo was apparently even followed by secondary symptoms. In this exceptional case, the secondary eruption appeared a month after the occurrence of the bubo, and may, like the others, have depended upon previous disease, or upon some accidental cause, such as the existence of gonorrhœa or some other cause of irritation.

On the other hand, I collected and tabulated in the same way thirty-one consecutive cases of secondary syphilitic eruption. In one only of these cases did the history afford any mention of a suppurating bubo; and in that one case the history is not satisfactory upon the point. Had the notes of cases of other years been collected and tabulated in the same way I do not doubt that they would have afforded similar results. Such facts appear to establish indisputably the proposition that the chances of the infection of the system, in cases of syphilis, are inversely in proportion to the degree of irritation and inflammation of the absorbent vessels leading from the primary seat of disease. As this doctrine might probably appear to many to be contrary to the opinions usually entertained, I thought it well for the satisfaction of others to collect some independent evidence on the point; and, for this purpose, I have used the register of the Lock Hospital, which is kept by the house-surgeons as they successively come into office. I found here recorded eighty consecutive cases of suppurating bubo. Of these, eleven were mentioned as having had some other syphilitic affection besides the strictly primary disease, during the time that they remained under observation. In four of these cases, this affection consisted of condylomata alone; in four, of a tubercular eruption; and in three of psoriasis. It is to be remarked that here there was an entire absence of any mention of the presence of lichen or lepra, affections of the most common occurrence as presenting themselves after infecting syphilitic sores. The condylomata, especially when they occur in female patients, are of such doubtful origin that they cannot be received as affording any evidence of the affection of the general system, at least as a consequence of the primary affections with which they are associated. Omitting, therefore, the cases in which they have been mentioned as occurring without any other symptom of constitutional disease, we have seventy-six consecutive cases of suppurating bubo from all causes, and in these mention is made of secondary affections in seven only.

The presence of secondary symptoms in this small proportion of cases may with justice be attributed to the recurrence of previous disease, or to a disease which did not produce the suppurating bubo. This view is materially supported by the kind of eruption observed. In four out of the seven instances the eruption was tubercular, agreeing in this respect with the results obtained from my own case books. The facts presented in both collections of cases, therefore, point to the conclusion that, in the comparatively rare instances in which secondary syphilis is found in conjunction with a suppurating bubo, it depends upon the system having been infected previously to the disease which has given rise to that suppuration; or upon the co-existence of a suppurating gland (from a non-specific source) with an infecting sore.

Since the period to which these records refer, upwards of seven years have elapsed, during which my attention has been particularly directed to the same point; and I have also had the assistance of some most intelligent and able house-pupils, who have every now and then brought me cases which afforded, at first sight, apparent exceptions to the law; but which, upon investigation, were found not at all to invalidate its correctness. The result of our observation has been that, during the whole of that time, we have not met with one unequivocal case of a primary sore which was accompanied by a suppurating bubo (furnishing an inoculable pus) and which produced secondary symptoms.

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* An instance was mentioned in the *Lancet* five or six weeks ago, in which a suppurating bubo was said to have followed an indurated chancre on the lip. The case was in St. Bartholomew's Hospital, under the care of Mr. Holmes Coote. Now, if I am rightly informed, it appears very doubtful whether this was a chancre at all; for, in the first place, although the sore was surrounded by a considerable amount of induration, yet the surface of the sore itself was not indurated; secondly, the sore was extremely painful, a condition not at all usual in indurated chancre; and thirdly, although the case has continued now for a very considerable period under treatment, there has, I believe, been no symptom of any constitutional affection. But even supposing the case to have been one of chancre, it is quite evident that the suppurating gland was not produced by the absorption of the syphilitic poison; for, had it been so produced, a true inoculation of the gland and surrounding parts would have taken place, and an open poisonous sore would have remained. In the case in question, as soon as the matter was discharged, the abscess healed; and this, in my opinion, proves that the suppuration was not originally produced by the lymphatic absorption of syphilitic matter.

Illustrations of HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

ON SLEEPLESSNESS.

By James Russell, M.D.

The importance of sleep in the economy of nature is well understood alike by the physiologist and the pathologist. By suspending for a season "the life of relation", it affords to the nervous centres an opportunity of repairing that waste in their nutrition which is involved in the performance of their active duties; and such an opportunity is essential for their integrity. Our great dramatist finely sums up the office of sleep:—

> "Sleep, that knits up the ravelled sleave of care,
> The death of each day's life, sore labour's bath,
> Balm of hurt minds, great nature's second course,
> Chief nourisher in life's feast."

Hence persistent absence of sleep is justly regarded as one of the most serious symptoms of disease.

My design is to illustrate a particular form of sleeplessness of very common occurrence; a form which affords excellent illustrations of the injurious consequences of that state, and exemplifies the pathology of a disorder which it is especially necessary to recognise at an early period.

It is essential, for perfect sleep, that the mind should suspend its activity. Mere intellectual effort can generally be terminated at will, and, therefore, does not often interfere with sleep, unless, indeed, it have been carried to the extent of damaging the nutrition of the brain; but the emotions will not subside at our bidding, and hence become most potent causes of sleeplessness. "Susannah, in *Tristram Shandy*," says Sir Walter Scott, "thinks that death is best met in bed; I am sure trouble and vexation are not. The watches of the night press wearily when disturbed by fruitless regrets and disagreeable anticipations.....Is it not odd, I can command my eyes to be awake, when toil and weariness sit on my eyelids, but to draw the curtain of oblivion is beyond my power?"

In investigating the cause of sleeplessness in our patients, we are very often able to trace it to one of the emotions; to grief "which claims the hours of solitude and of night for its empire"; to remorse; to care respecting worldly concerns; to the designs of ambition, the schemes of avarice, the responsibilities of business; and, above all, to the various forms of suspense, whether embodied in the shape of anxiety or of hope; and as these are passions which are inseparable, to a certain extent, from our commerce with the world, it is of the highest importance that we should recognise their presence, and provide, if possible, against their injurious influence.

Case i. An elderly gentleman was engaged in a very extensive business, the whole responsibility of which devolved on himself. He toiled incessantly; and used to rise at four in the morning to look after his men. His mind was constantly on the stretch. He would sit over his work late at night, nodding with sleep, till his wife took it from him. His nights were disturbed and sleepless, and he started and talked constantly in his sleep. He at length manifested evident signs of failing; he became restless and irritable; his spirits were uncertain, often very depressed; he had indefinite fears about himself, and lost his appetite. Three times he had an attack of impaired power in his hands, with some loss of sensation. He became quite unable to look after his accounts: and but for his wife's supervision would have lost hundreds of pounds. He mended greatly under the influence of opium, but a year afterwards died with all the symptoms of sanguineous apoplexy.

Case ii. Anne Bamford, aged 35, a healthy looking woman, but affording evidence of a nervous temperament, was perfectly healthy, and free from nervousness, till two years and a half ago, when she became subject to great domestic trouble. For some time her husband was very unkind to her, and irregular in his habits; he struck her, and she "never seemed to overget it." Her mind became impressed with her troubles, and she was unable to forget them. She lay awake at night, and for three days never tasted food. During the night she used to see strange things around her bed, and does so still; once she thought she saw the devil. She used to awake in a fright and in "a cold sweat." Her spirits have been low, and even now she bursts into tears when speaking of her sorrows. Ever since that time, she has been subject to dreadful headaches, to vertigo, short breath, and palpitation, and lately she has lost flesh.

These disturbing influences do not act upon all persons alike; many circumstances modify their operation; none more powerfully than temperament or mental constitution. The seeds of worldly care find, in the mind of some persons, a soil ready prepared for their reception, in which they germinate rapidly, and bear melancholy fruit. Such is the case with individuals of an anxious temperament, or of a fretful disposition, who are ever ready to meet trouble half way, and possess a wonderful talent for entertaining, at a single view, every consequence possible and impossible, or who accept the discipline of life in a spirit of opposition, and offer resistance, where it would be their duty as well as their policy to accommodate themselves to it.

To all such the trials which are inseparable from active life are intensified greatly; and even daily duties, to the well regulated mind a source of healthful exertion, become multiplied fourfold in the trouble they occasion. "The bowl that rolls easiest along the green goes farthest, and has least clay sticking to it. I have often noticed that a kindly placid good humour is the companion of longevity, and, I suspect, frequently the leading cause of it."

The same effect is not unfrequently the result of an unhealthy state of nervous system, produced, too often, by defective education; in a large number of instances, however, existing as a substantive disease, quite independent of the operation of care and trouble. Patients of this class fall into a state of nervous depression, in which fancied evils take the place of real ones, and operate equally to wear the mind, and to disturb repose. The complaints which are made by such persons are often quite incomprehensible, unless explained by a morbid state of mind, rivetting the attention upon some sensation, or creating some supposed malady, upon which the imagination feeds; and it must be always remembered, in regard both to pathology and to treatment, that the imaginary evils have to the patient all the substance of reality, and, consequently, produce the same effects upon mental and bodily health. For example, a very nervous man lay awake till daylight, in consequence of feeling his breath short, and of having found an eruption on his legs. An exceedingly nervous woman, full of every conceivable complaint, was kept awake at one time, by fancying that something had passed from her rectum; then she could get no rest from pain and "swelling" in her womb, and affirmed that she was "sinking under it." A woman, who had been in a nervous state for three months, was kept awake by cough, and sometimes by pain in her sides and shoulders, so that during some nights "she has not had an hour's sleep, and was obliged to sit up with the pain." A man was kept awake by hearing the beating of his heart; a woman who had been subjected to much anxiety was sleepless from pain in the head and fluttering at the heart; and a man affected with low spirits complained of muscular pains, which he called rheumatic; he slept from ten till twelve, but not afterwards.*

Circumstances which induce debility or depress the nutrition of the body, greatly increase the effect upon the mind produced by the unfavourable influences alluded to above; thus care and sorrow often find a too ready ally in bodily feebleness, or an attack of nervous disorder follows prolonged lactation, miscarriage, hæmorrhage, or temporary depression of health, or may step in to aggravate the sufferings of phthisis or prolonged debility.

The following cases will illustrate the condition of sleeplessness, with its accompanying nervous depression, resulting from some of the various causes I have mentioned.

Case iii. Eliz. Perrin, aged 43, a very respectable woman, of a nervous temperament, was much alarmed by a fire at her husband's warehouse a year and a half ago; and has since been subject to great anxiety from the prolonged illness of her husband, and the consequent loss of means of support. The intelligence of the fire brought on a violent hysteric fit, which has recurred three or four times; the sudden attack in which her husband's illness commenced, occasioned premature and very profuse menstruation; and since that period (fifteen months ago) her menstrual periods have been frequent and very profuse. Often entire nights have been passed without sleep; she was unable to interrupt the train of thought which occupied her mind, nor could she turn from painful reflections. She then became subject to alarming dreams, to spectral appearances of men in her room, and, less frequently, to aural illusions. She complained to me of faintness, with frequent severe vertigo; the hysteric fits had become more frequent; and her spirits were much depressed. Her appetite was bad; she was compelled to force down her food. She had lost flesh considerably, and had become quite anæmic.

Case iv. Priscilla Burton, aged 39, of nervous temperament, seven years ago suffered from a prolonged illness, which confined her to bed for seven months. A year and a half ago she was subjected to great anxiety, on account of the illness of her husband; she fretted a great deal, and emaciated rapidly. She then became very restless, and could not sit still; she was haunted by indefinite fears, and dare not go even into the street. Her sleep was broken by dreams, from which she awoke in a fright, with perspiration or palpitation; and she cried out in her sleep. She often saw spectres. Frequently she went to bed at nine, and lay awake till early morning "thinking of things." Her spirits became greatly depressed; and she had fits of crying, from which she felt relief. She was thin, pallid, and hollow-eyed; complained of gastralgia after eating, of uncertain appetite, and loss of flesh; of vertigo and frontal headache, palpitation and short breath. Her menstruation was irregular. Although she derived much benefit from soporifics and tonics, yet her nervous power was so depressed, and her power of struggling against her complaints so feeble, that she still requires medical care, although eighteen months have elapsed since first she came under my notice.

Case v. Martha Roberts, aged 30, presents symptoms of phthisis, with considerable anæmia. She is kept awake by "frightful thoughts"; she dreams when she doses, and her husband is obliged to awake her on account of her screaming. She has not had much anxiety, but is of very anxious temperament, and takes everything to heart. She has been subject to hysteric fits. She derived benefit from soporifics.

Case vi. Anna Luton, aged 66, applied with symptoms of disease of the heart. Her principal complaints, however, were of a nervous character, and referred chiefly to loss of sleep, which she ascribed to the beating of her heart. She had lost her sleep for three or four months. Her heart, she stated, "was sometimes as though it would burst," and the palpitation was always worse when she was in bed. The beating worried her, made her very low spirited, and kept her awake; and if she fell asleep, she started up; so that, as she said, "her sleep was no good to her." She was pallid and cachectic; had not been subjected to anxiety.

Case vii. A cook, aged 42, of very nervous temperament, was the subject of organic disease of the heart (mitral disease), probably due originally to an attack of rheumatic fever twenty years before. She was liable to repeated attacks of severe palpitation; in one of these, which seemed occasioned by disorder of the stomach, I first saw her. I could distinctly hear the beating of her heart at some feet distance from her bed. Sleeplessness was then a very prominent symptom. Soon afterwards the attack was renewed, apparently by seasickness; and it attained great severity. With it tho sleeplessness returned. For a fortnight before her return home, she never slept. Her mistress, who was greatly attached to her, watched her closely, and told me that she went into her room at night, but always found her eyes open; so that at last she begged the patient to shut her eyes, if she could not sleep.

She was brought home in a most distressing state, greatly exhausted, and with extreme irregularity of the heart's action, still sleepless; and in a day or two she became jaundiced and anasarcous. Her urine was free from albumen. I saw her with the late Mr. Wickenden, and found her in the state described above, excepting that the jaundice and anasarca were partially relieved. She took little food.

At the end of the fourth week, her fellow-servant observed her manner to be peculiar; but on the two following days her appetite had returned, and she had slept for three hours in each night. On the third morning, her manner was noticed to be sharp and abrupt; and the day after she was perfectly delirious. The delirium continued for five or six days. She sometimes talked rapidly and incoherently, and was very noisy; sometimes she lay perfectly silent, hardly noticing what was said, but laughing in a covert way, as though we were doing some foolish thing. For a day and a night she was perfectly unmanageable and violent; at other times she was easily controlled. There was still the same abrupt, hurried manner; she seized her food, ate it rapidly, and then fell to picking the bones with her fingers.

She never recovered bodily health after this illness.

In the foregoing case, the sleeplessness was produced by a highly excitable state of the brain, the consequence, no doubt, of organic disease acting upon a nervous system constitutionally predisposed to take on that state. In the following case, the same effect was simply the result of orthopnœa. In both cases, the consequences of prolonged want of sleep, in the disordered condition of the nervous functions, and in the progress of the organic disease itself, were most serious.

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* Of course, considerable deduction must be made from the absolute amount of sleeplessness, when we rely upon the account given by the patient; but this circumstance does not invalidate the proof that great interference with healthy sleep has existed.

Case viii. Miss P., aged about 60, died from degeneration of the heart. During her illness, she was subject to repeated fits of great dyspnœa, of a very alarming character, so that in two months time she could only creep up and down stairs, and soon after was entirely confined to her chamber. She was often compelled to sit up in the night for several hours, in consequence of shortness of breath and of an impending attack. On April 11th, it is noted that she has an attack very frequently, and is beginning to suffer from want of sleep; on the 13th, that the last night is the fifth in succession of the occurrence of an attack; she can scarcely lie down, and looks quite ghastly from want of sleep. Morphia was administered, and succeeded at first in procuring imperfect sleep; but, unless under the influence of it, she was quite unable to lie down. She could only avail herself of the benefit of opiates sparingly, on account of their producing a state of mental disorder; and she was soon obliged to dispense with their use. She sat constantly with her chin resting upon her chest, so that her neck was quite bowed. From this posture she never moved, even to eat.

Thus she continued for a month. On May 23rd, I found her in a state of mania; she had previously been delirious at night, but was usually rational by day. She now believed herself encircled by a galvanic wire, and was possessed with the idea that we were conspiring against her. She shrieked, drove the servant away, clung to the friend with whom she was residing—her face expressive of the wildest horror and affright. She called down curses upon her persecutors, and cried out to the nurse, "You have brought that horrid form to attack me," evidently referring to some phantom. Subsequently her mind seemed occupied with the spiritual world, and her thoughts took a religious turn. The violence of the attack lasted only twenty-four hours; but she died three days afterwards. It was remarkable that, under the influence of the excitement, she could sit quite erect; and that immediately afterwards she was able to lie down, and continued to lie during the last three days of her life.

The effects produced by the constant wear and tear of the nervous centres, illustrated in the foregoing cases, are soon painfully manifest in the nervous system and in the functions of organic life; they constitute a group of symptoms strikingly resembling those of alcoholism. The mind is oppressed by gloom and despondency, and is harassed by fear, often undefined, often assuming a distinct shape, and related to worldly interests, to family affairs, or to bodily health. The patients become irritable and restless; daily duties are a trouble, and even the sports of their children are insupportable. A lady spoke to me the other day most feelingly of her painful position between her children and her overworked husband. Sometimes, though more rarely, the mind resists the enfeebling tendency of its condition, but, in resisting, is hardened into harshness. All force of character is lost; and this prostration of mental energy opposes the most powerful obstacle to the recovery of the patient, by depriving him of the means of overcoming the depressing influence under which he labours; so that in time restoration to health is all but hopeless.

Intense headaches, faintness, and vertigo, indicate the state of depraved nutrition into which the brain has fallen; but in no particular is the enfeebling of mental power more manifest than in exaggeration of the emotional element. The patients "can cry for hours"; they "burst into tears if spoken to", and their tears often afford relief; one poor woman earnestly asked me for some medicine to make her cry.

Hysteric fits are an exaggerated condition of this loss of control over the emotions. I have found distinct hysteric fits in twenty-three of forty-nine cases.

Case ix. Mary Lewin, aged 53, a fine well-made woman, to appearance free from nervous tendencies, had been for some time exposed to excessive fatigue and anxiety, from the protracted illness of her husband, and from the necessity of working by day, whilst her nights were occupied by nursing. The fatal nature of her husband's malady, besides, caused her deep grief. She was further lowered by menorrhagia, consequent, no doubt, on the same cause. One day, in going for medicine, she fell down in a violent hysteric fit, which was speedily followed by a second. She had not suffered from such an attack for twenty years.

I believe that a very large proportion of hysteric attacks will be found to date from some mental perturbation; at least, I have frequently succeeded in tracing them to this cause, even in girls.

Case x. Elizabeth Owen, aged 42, had always enjoyed perfect health up to the period of her marriage. She could do any work, "nothing daunted her"; but her husband "took to drink", and she fell into a state of depression, which ended in miscarriage, after which she was very ill for three months. She has since had more to bear than she had thought possible to be endured. Some nights she cannot sleep at all, or she "dreams and mithers" so much that her sleep does her no good. She sees all kinds of dreadful visions, which render her afraid of falling asleep; and of late she has lain neither awake nor asleep, seeing all kinds of faces. For three years she has been subject to hysteric fits, and for a much longer period has suffered from frequent loss of voice, and during the last two years has never passed a week without losing her voice when "anything put her about". Once she lost her voice for four months. She has, besides, hysterical dysuria.

In a former paper I gave some instances of epilepsy produced by mental harass; and two of the preceding cases afford examples of delirium produced in great measure by want of sleep.

Nor do the bodily functions suffer in a less degree than the mental.

> "Danger, long travel, want or woe,
> Can change the form that best we know—
> For deadly fear can time outgo,
>   And blanch at once the hair;
> Hard toil can roughen form and face,
> And want can quench the eye's bright grace,
> Nor does old age a wrinkle trace
>   More deeply than despair."

In softening of the brain, says Andral, "respiration is affected; hæmatosis is performed imperfectly; digestion is deranged, and general nutrition deteriorates"; and the same description applies to the present case, from a like cause. A state of depraved health is often the principal change apparent for a long time; and it is a most important circumstance, that a very large number of cases of lowered health owe their origin to these causes, and, if not understood, may ultimately pass into a state of permanently depraved nutrition. A gentleman suffering in consequence of overwork and anxiety in a large business suggested to me that I should place him under a system of training, as if he were preparing for a prizefight; but an appeal to his personal experience drew from him the admission, that there were elements in his case which would effectually bar the success of a trainer.

Case xi. I was called, some time ago, to prescribe for a respectable woman, who presented all the characters of advanced phthisis; but I could discover no physical signs to justify such a diagnosis. Her countenance indicated anxiety; but I was quite unable to obtain any admission in confirmation of my suspicion. A short time afterwards, however, I noticed accidentally a placard offering a reward for the apprehension of her husband, who had plundered his employers, and had absconded with a woman with whom he had for some time formed a connexion.

Loss of appetite is an early symptom, induced, in the first place, by mental prepossession, but often kept up by want of will to overcome distaste for food. Gastralgia, often very severe, uneasy sensations after eating, and muscular pains, are prominent complaints. The patient loses flesh, often considerably; and pallor or perfect anæmia results. I merely mention various organic diseases, as phthisis, degeneration of the heart or kidneys, etc., which may be final consequences. Death may even occur without the intervention of any organic disease. The sad fate of Scott's friend, Lord Kinnedder (Lockhart's *Life*, vol. v, p. 210), and Dr. Abercrombie's seventeenth and probably his eighteenth case, are illustrations.

The following melancholy case much resembles Dr. Abercrombie's, and was probably of the same character, though unfortunately not verified by a *post mortem* examination.

Case xii. I was requested by a medical friend to visit, with him, a young woman in good circumstances, of a very nervous excitable temperament. She had contracted an unhappy connection with a gentleman, and been just confined with her second child. Her pregnancy had been attended by circumstances of peculiar disquietude, and as the time for her confinement approached, she had manifested a degree of restlessness and anxiety hard to be accounted for. She was much reduced by hæmorrhage during labour, and subsequently refused to take sufficient nourishment under an absurd dread of fever. Her uneasiness of mind increased to a great extent, although the most kind and judicious measures were taken by my friend to soothe her. She was plainly in constant dread of some expected event, and perpetually on the watch. In the evening of the fourteenth day after labour, she was much excited by the insolence of an attendant, and on the following morning was somewhat incoherent; towards evening she became more excited, and fell rapidly into a state of coma. The insensibility was accompanied by a peculiar hysteria-like agitation of all her muscles; her right pupil was much contracted; the left was much dilated; *there was no paralysis*, nor any alteration of her face. The surface of her body was bedewed with profuse perspiration. She died the same night.

The menstrual functions in women are especially apt to suffer. Case x is an instance of miscarriage (I could add three more); and Case iv of premature and profuse menstruation. In forty-three cases in which the menstrual period of life had not been passed, menstruation was natural only in seven, irregular in seven, scanty in thirteen, and profuse in fourteen; two had "flooded". Hæmorrhage from one or more of the mucous membranes appears not an unusual consequence.

The following cases illustrate some of these effects upon general health.

Case xiii. Mary Corson, aged 30. She has suffered from great anxiety. About seven years ago, her husband deserted her, having infected her with gonorrhœa; she was soon after confined with twins, and her recovery occupied three months. Her troubles continued to press upon her mind, and three months afterwards she suddenly became deranged, and it was six weeks before her reason was fully restored. About two years and a half ago, she was seized with vomiting of blood. Twelve months since, menstruation ceased, and she spat blood several times subsequently, and bled at the nose. She has been emaciating for a long time; has been very feeble, and has suffered from muscular pains; her legs have swelled, and she has had cough and expectoration, with short breath and palpitation. Her appetite has been very bad, and she has had headache and vertigo. She has lost her sleep; occasionally she sees spectres. Some time ago, having been unusually annoyed by spectral appearances, she suddenly became unable to articulate without much hesitation and stammering, and this symptom was present during the early part of her attendance. When she came under my care, she had a peculiar anxious expression, with hollow eyes, and was very thin. Menstruation had reappeared, and was very profuse, and has continued to return profusely once a fortnight. She has now been under me two years, and has twice been an in-patient. Emaciation has progressed to a very considerable extent, and all her symptoms have returned on each occasion of her leaving the hospital. She has suffered repeatedly from hæmatemesis, hæmoptysis, and epistaxis; menstruating profusely in addition. Her case is hopeless, in no small degree from utter prostration of all mental energy to resist despondency and fretting, and to aid her own recovery. I have repeatedly failed to detect any organic disease.

The last case which I shall quote stands in contrast with the preceding, in exhibiting the aid which the medical man and patient may derive from strength of mind possessed by the latter; a condition essential for recovery from the more severe forms of the disorder.

Case xiv. It occurred in the person of an elderly lady, who was exposed to constantly recurring worry and anxiety for a length of time, without enjoying the opportunity of relieving her mind by unburdening it to a friend. She would probably have succumbed to the trouble she endured, had she not possessed a mind of singular firmness and composure. At last, however, she became the subject, through three or four years, of a series of very grave disorders of nutrition, of considerable diversity, and of persistent severity, including obstinate constipation, loss of appetite, great emaciation; with pallor and sallowness equal to that which is observed in the most advanced malignant disease; a condition to which her aspect bore an alarming resemblance. She suffered from severe irregular pains of a rheumatic character; and from local inflammation in one foot, affecting the integuments only of a particular portion, and after two months proceeding to very limited suppuration. She was completely disabled for a lengthened period; and aggravations of her disorder, which occurred from time to time, were always distinctly traceable to the operation of renewed mental harass. For the last three years, circumstances have changed, and mental disquiet has lessened; in proportion as this has occurred, the ailments have, in the main, disappeared, and she now enjoys a tolerable share of health, although both mind and body retain the scars which remain from the conflict she has endured.

In truth, we must mainly rely upon the patient's exertions, aided by tonics, and, above all, by soporifics; and, in conducting these difficult cases, the mental power and patience of the medical attendant are taxed almost as much as those of the patient; the mind of each requires education, almost to an equal degree. On some future occasion I shall endeavour to illustrate the operation of certain soporifics in this important class of disorders.

Paying for his Practice. An Arab was cured of a frightful malady by the English physician who was travelling in the East with Lamartine. After the completion of the cure, the Arab went to the English doctor, *not to pay his bill, but to ask for a considerable pecuniary gift.* On the physician peremptorily declining to adopt this course, the Arab remarked that he had hoped to find him more ready to manifest this gratitude to God for conferring on him knowledge enough to cure such mortal diseases as he, the Arab, had lately been struggling against.

Original Communications.

REMARKS ON BEEF-FIBRE JUICE.

By J. Jardine Murray, Esq., F.R.C.S.E., Surgeon to the Brighton and Hove Dispensary, and Assistant-Surgeon to the Sussex and Brighton Infirmary for Diseases of the Eye.

At the last meeting of the Obstetrical Society of London, Dr. Druitt exhibited a concentrated extract of beef, and claimed the merit of introducing it as a remedy for intense nervous exhaustion.* He believed that the beef-juice differed from beef-tea, and from all other extracts of beef hitherto sold: it was simply the expressed juice of meat-fibre, without superadded moisture, and was prepared by subjecting beef to a high temperature. It contained no fat, no fibrine, no albumen, no gelatine. The only difficulty was to preserve it.

But Dr. Druitt has been forestalled in the recognition of the value of this material, and in introducing it to the notice of the profession. In an article published in the *Monthly Journal of Medicine* for January 1855, Professor Christison strongly recommended this same preparation; and he went a step further than Dr. Druitt, in showing how it may be preserved. I quote his description of the mode of preparing and preserving the meat-juice, as I believe it will require little consideration to convince medical men that the process is perfect, and that the essence of beef thus procured materially differs from all similar preparations, and surpasses them in excellence.

"Cylindrical cases of tinned iron are filled each with six pounds and a half of beef; and the lid is soldered on, but with a hole about half an inch in diameter in the middle of it. Two trays of such cases are shoved into iron retorts, analogous in form to retorts for gas-making, but double-cased, so that steam may be introduced into the interstice around. They are thus subjected to a heat of 220° under steam pressure for about three hours, by which the beef is partially cooked, and, being thus also made to contract strongly on itself, squeezes out a portion of its juice, amounting to a few ounces from each tin. The tins are then drawn; the juice is poured out; and the meat, with certain additions, is subjected to the preservative process. The juice, after being cooled and entirely freed of fat, is put into small four-ounce tin cases. Each of these has a small aperture at one end, which is secured with solder after the juice is poured in. The tins are then subjected, on trays, to a temperature of 220° in a muriate of lime bath. On being removed, the solderer rapidly touches with his iron the solder on the top, which giving way allows steam to rush out forcibly and carry with it the air in the upper part of the interior. By the time he has thus swiftly passed over sixteen or twenty tins, the first is ready for being re-soldered by a similar dexterous application of his iron, which then in succession as quickly secures the whole open and steaming apertures. The process of heating in the bath, tapping, and re-soldering is then repeated a second time, to make sure of the thorough expulsion of every particle of air."†

Having been strongly convinced of the great value of the essence of beef so prepared, I have used it extensively in all cases of prostration, from whatever cause; and I cannot doubt that, in several instances which have come under my observation, it has been the means of saving life. Three years ago, when attending a case with Dr. Walshe, I submitted this adjuvant remedy to his notice, and it has since met with his warm approval. The patient was extremely weak and emaciated, but took almost no other nourishment during many days, and subsequently did well. I have administered the nutrient material *per rectum*, at intervals of three hours, to a child who afterwards made a very unlooked for recovery from the most aggravated form of scarlatina, with sloughing throat, profuse acrid discharge from the nostrils, suppuration of the glands of the neck, and low muttering delirium. And, in an instance in which all food was obstinately refused, I caused the concentrated beef-juice to be sent from the druggist in bottles, to be taken as medicine at stated intervals.

Of course it is not to be expected that any article of diet which may be ordered to be taken once or several times a day will long be relished; but certainly this essence makes better, cheaper, and more palatable beef-tea than any which can be prepared by boiling. Indeed, a gentleman lately under my care became so fond of it that, in leaving Brighton with the intention of travelling to Italy, he added to his luggage a box of cannisters containing beef-juice.

By slow evaporation of sixteen fluidounces of the liquid, I obtained scarcely one ounce weight of solid extract. This is intensely sapid, and not disagreeable; but I very much doubt its being equal in value to the fluid from which it was obtained.

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* See report in *Lancet* and British Medical Journal, May 11th, 1861.

† This beef-juice is manufactured by Messrs. Gillon and Co., of Leith.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

LARYNGITIS: DEATH UNDER CHLOROFORM, ADMINISTERED PRIOR TO AND DURING TRACHEOTOMY.

By J. G. Davey, M.R.C.P.Lond.

[*Read at Bath, April 25th,* 1861.]

The patient was a little boy, aged 7 years, the son of a clergyman living at Thornbury. I saw him, for the first time, with Mr. Salmon, surgeon, of that place, last Monday fortnight, about 3 a.m. At this time the symptoms of laryngitis were urgent; but he was said to be better than he had been. The respiration was much oppressed, and of that peculiar crowing character which belongs to the disease; the voice was husky and croaking, and very faint, reduced frequently to a mere whisper. There was occasional cough. On looking into the throat, the fauces and tonsils were seen of a bright scarlet colour. The pulse was hurried, about 120; the countenance anxious; and the vital powers seemed oppressed. Hot baths, counterirritation, calomel, with emetics, were the means of treatment adopted by Mr. Salmon. I advised the inhalation of hot-water vapour, the solution of nitrate of silver as a topical application, and an additional emetic of ipecacuanha wine. Wine and water, milk, beef-tea, and such like, were directed to be given in small quantities, and according to circumstances.

I met Mr. Salmon again, with Mr. Long and Mr. Gill, about 10 p.m. of the same day (Monday). It was our unanimous opinion that the little boy was not only much worse, but in the most extreme danger; and that tracheotomy offered but a slight chance of relief. After some unavoidable delay, the operation was performed. Mr. Salmon was not very well, and he therefore asked me to operate for him: this I did. In addition to the assistance of Mr. Salmon, I had that of Mr. Long and Mr. Gill. The two last named gentlemen managed the administration of the chloroform. I need not add, that the chloroform was used in the most careful manner—*i. e.*, diluted, as far as practicable, with the atmospheric air, and allowed to be inhaled very slowly. No time was lost in the several steps of the operation; the trachea was quickly opened, and the tube duly inserted. The rapid up-and-down movement (*i. e.*, spasm) of the glottis, larynx, etc.—and which formed a particular feature in the case—was relieved by the inhalation of the chloroform; so that there was no kind of difficulty in fixing the trachea and incising it. However, the tube was scarcely within the trachea ere our patient gasped and died. Artificial respiration was directly commenced, and continued for about twenty-five minutes. Cold water was dashed on the face, and neck, and chest; and stimulants were externally applied; but with no effect.

Forty-eight hours after death, an examination of the body was made by Messrs. Long and Gill of Thornbury; and I am afforded the opportunity of presenting for your inspection the diseased parts. You will observe that the mucous lining of the larynx is greatly changed from its normal state; that there is much infiltration into the tissues affected; and that these present signs of a general "engorgement", with marks of ulceration. The lymph so abundantly effused has taken on a puriform character—a good evidence of the acute nature of the affection. The epiglottis, too, is thickened and erect. The piece of quill occupies the site of the incision into the upper part of the trachea.

Such, then, are the simple facts of an unlucky case. I suppose it must be conceded that the *proximate* cause of death was chloroform; but, no doubt, the antecedents—the pathological antecedents—of our little patient had very much more to do with the sad and fatal termination recorded.

Before I sit down, I would invite your attention to this small instrument. It is just possible it may be unknown to some few gentlemen present. The *tracheotome*, invented by, I believe, the late Dr. M. Hall, is an excellent substitute for the ordinary scalpel, etc. With this very ingenious contrivance, the performance of tracheotomy is indeed a very simple affair.

Abstract

OF A PAPER ON

URÆMIC INTOXICATION.

By W. A. Hammond, M.D., Professor of Anatomy and Physiology in the University of Maryland.

Professor Hammond has a long article on this subject in the *Amer. Jour. of Med. Sciences* for Jan. 1861, in which he controverts the opinion of Frerichs, that uræmia is due to the conversion of urea into carbonate of ammonia, and ascribes the poisoning to direct action of the elements of the urine retained in the blood, upon the brain and nervous system; and among these elements, urea may be deemed the most poisonous. Frerichs performed two series of experiments upon which his theory is based: the first of which consisted in injecting into the veins of dogs, the kidneys of which had been previously removed, a solution containing from thirty-one to forty-six grains of urea. In a period varying from one and a quarter to eight hours, the animals became restless, vomiting and convulsions followed, ammonia was expelled with the expired air, and coma and death supervened; after which ammonia was found in the blood, stomach, bile, and other secretions. In the second series, a solution of carbonate of ammonia was injected into the circulation, the kidneys remaining intact; convulsions occurred immediately, followed by coma, the expired air meanwhile loaded with ammonia. As this ceased to be expired the animals slowly recovered. The author considers this no evidence that carbonate of ammonia was the cause of death, but on the contrary that ammonia may generally be detected in the respiration of healthy dogs, and is generally present in the blood of most animals, the truth of which he has satisfied himself of by repeated observation and experiment.

It is admitted that urea is a normal constituent of the blood in variable proportions; and it is only when the kidneys fail to eliminate in accordance to the requirements of the system, that the normal balance between the urea and blood is disturbed. In support of his views, the author cites three series of experiments, the first of which was the injection of urea into the blood of sound, healthy animals. Large dogs were fed for three days on meat, during which time ammonia was constantly found in the breath, and urea in the blood. Upon injecting a solution of urea, symptoms of uræmia were soon apparent, of a severity in proportion to the amount injected. Upon a second examination of the blood, the urea had increased in quantity, while the ammonia remained about the same. "From the foregoing experiments it is perceived that there is a limit to the power of the system to eliminate urea, and that when this substance is introduced into the blood in large quantity, it causes death by uræmia."

The second series of experiments had reference to the effects following ligature of the renal vessels, or removal of the kidneys. For this purpose large dogs were selected, urea found in the blood, and ammonia in the breath before the operation. After removing the kidneys, or ligating the arteries, the amount of urea was increased threefold in a short time, and there was no evidence of any of it being converted into carbonate of ammonia. The animals died in periods varying from forty-nine to two hundred and seventy-eight hours. Congestion and inflammation of important organs were produced, as after injection of urea into the blood, or during the course of Bright's disease. It was also seen that "so long as vomiting and purging continued, there was no accumulation of urea in the blood, and consequently no uræmic intoxication.

In the third series, the kidneys were removed, and urea or urine was injected into the blood, which induced death with all the symptoms of uræmia, in from eight to fifteen hours; and when urine was injected into the circulation death occurred in a shorter time than when simple urea (though to a greater amount) was used in solution, whence it is inferred that urea is not the only poisonous element in urine. From his experiments and observations, Dr. Hammond arrives at the following conclusions:—

1. The injection of urea, in limited quantity, into the blood of animals, produces a certain amount of disturbance in the nervous system, similar in its symptoms to the first stages of uræmia, but that this condition even disappears, if the kidneys are capable of so depurating the blood as to eliminate the toxic substance.
2. Urea, when introduced into the circulation in larger quantity than can in a limited period be excreted by the kidneys, induces death by uræmia.
3. By ligature of the renal arteries, or removal of the kidneys, the elements of the urine being retained in the blood, render this fluid unsuitable to the requirements of the organism, and, consequently, induce a condition of system not essentially distinguishable from the uræmic intoxication of Bright's disease, or that caused by the direct introduction of urea into the blood. As, however, was pointed out by Bernard and Barreswil, so long as the urea, or the products of its metamorphosis, are discharged by the stomach or intestines, uræmia does not take place, but, that when these channels become closed, convulsions and coma are produced, and death soon follows.
4. The introduction of urea or urine into the circulation of animals, the kidneys of which have been ablated, shortens the life of such animals, as Frerichs and others have already shown.

5. There is reason to believe that the urine, as a whole, is more poisonous than a simple solution of urea, for, in those cases in which urine was injected into the blood, the amount of urea thus introduced was much smaller than that previously thrown in, in a pure state, and yet symptoms of as great intensity followed.

6. Urea, or the elements of the urine, as a whole, induce such a condition of the nervous system, as strongly to predispose to congestion and inflammation of the viscera, especially the lungs, pericardium, and spleen.

7. Urea, when directly injected into the blood, or suffered to accumulate in this fluid by extirpation of the kidneys, deranges, in some manner, the process of sanguification, so as to disturb the normal relation of proportion existing between the white and the red corpuscles, and either to hasten the decomposition of these latter, or to interfere with the due removal from the blood of such as are broken down and effete.

8. There is no reason to suppose that, under the circumstances specified, urea undergoes conversion into carbonate of ammonia, but that, on the contrary, there is sufficient evidence to warrant the conclusion that no such process ensues. The fact that in the foregoing experiments a larger amount of urea is generally found in the blood taken from the body after death, than in that abstracted during life, is, of itself, conclusive against any such hypothesis.

Progress of Medical Science.

Microscopic Diagnosis of Ringworm. The presence of the sporules of a fungus is an essential character. These are usually best seen in groups on the outside of the hairs; but a little practice will soon enable the observer to detect them in great numbers in the interior of the hair-shaft itself. If any hairs have been pulled out with their bulbs, the sporules may most probably be seen very distinctly in the lower and less opaque part of the latter structure. But the peculiarities presented by the hairs themselves (apart from the actual demonstration of parasitic elements) are very marked. Instead of being round, of regular thickness, in long portions, and partially translucent, they are black, in short broken fragments, swollen, bulging at parts, and with their external layers split off in places. The black tint (which is due, not to pigment, but to altered refraction from disturbed arrangement of the hair-fibres) is arranged in longitudinal bars, giving the hair a fasciculated appearance. If the extremity of a ringworm-hair be brought under view, it is seen to be broken and split up into fibres, resembling on a small scale the stump of a worn besom. In and on the epidermic scale, sporules will also be found. It is consistent with my own observation, that the younger the patient the more likely is the disease to be restricted almost solely to the hairs of the scalp; whilst in those beyond the age of about ten years, the epidermic scales are often attacked, the hairs being less extensively affected. When the patches are situated on the skin of the trunk, neck, or anus, the small hairs of the part are almost always attacked, but they do not become infiltrated in the manner so often seen on the scalp, nor do they usually break off. In these regions the disease is primarily one of the epidermis rather than of the hairs. (*Mr. Hutchinson.*)

On some Applications of Glycerine. Mr. G. Wilson observes that there are a variety of purposes to which glycerine may be applied in pharmacy. First, in the preparation of a concentrated mistura ferri composita. Carbonate of potash and sulphate of iron may be dissolved in separate portions of glycerine, and then mixed; the carbonate of iron produced is dissolved at the moment of its formation, and will keep unchanged for any length of time. When required for the mixture, the necessary proportion of the solution (which can be made of any strength) is added to the other ingredients. The carbonate of iron is precipitated when the solution is mixed with water. Glycerine has also been recommended as a substitute for sugar in the preparation of the syrup of iodide of iron, but in this case its use has been found rather disadvantageous than otherwise. Solutions of the following substances in glycerine will be found of great use:—ammonio-citrate of iron, eight grains to the fluid-drachm, and citrate of iron and quinine, two grains to the fluid-drachm. A solution of two grains of disulphate of quinine in a fluid-drachm of glycerine might also be thought to be useful, seeing no acid was necessary to effect the solution. Quina might also be dissolved to the extent of one grain to a drachm, and tannin to the extent of eight grains in a drachm. In the last case, the glycerine prevents the decomposition to which tannin was liable in aqueous solution. Preparations of senna and rhubarb, eight times the strength of the *Pharmacopœia* infusions, may be made, and no alcohol is required for their preservation. Solutions of essential oils, such as cloves, cinnamon, and lemon, may also be made with glycerine in the place of spirit. It can also be used to preserve fresh lemon-juice, and generally in the preparation of pills and confections. (*Pharmaceutical Society.*)

A Pathognomonic Sign of Scarlatina. For some years past, M. Bouchut has been in the habit of pointing out in his wards a curious sign which assists in the discrimination of scarlatina from measles, erythema, erysipelas, etc. It consists in an enduring *white stripe* produced at will by drawing the back of the nail or any hard substance over the part of the skin in which the eruption exists, and which streak lasts one or two minutes, and sometimes more. Figures may thus be traced upon the skin, the lines of which are conspicuous from their whiteness. With a blunt probe or penholder, the diagnosis of the disease may be distinctly inscribed on the integument, and after a minute or two the word *scarlatina* disappears, when the uniform tinge of the eruption again invades the written surface. This phenomenon is observable in scarlatina only. In measles, the procedure would produce an alternately red and white streak, enduring a much shorter time than in scarlatina. In erysipelas, in the redness induced by a mustard-poultice, in solar erythema, the white line is not visible. M. Bouchut considers the phenomenon to be due to a considerable increase of the contractile power of the capillaries, proportionate to the intensity of the disease, the regularity of the eruption, and the amount of vital power. The capillaries contract, and expel their contents, hence the *white stripe of scarlatina.* This excessive tonic contractility of the blood-vessels is further remarkable, inasmuch as it is peculiar to this disease; once brought into play by pressure, the vascular contraction seems to last one or two minutes, a circumstance which does not occur in any other morbid condition. (*Journal of Practical Medicine and Surgery.*)

Gargle for Syphilitic Sore-Throat. A formula for a gargle is given in the *Gazette des Hôpitaux*, by Dr. Remoussin, who speaks highly of its efficacy in syphilitic ulcerations of the throat. It is as follows:—Decoction of conium, ten ounces; bichloride of mercury, four grains; rectified spirits of wine in sufficient quantity to dissolve the mercury; mix, and make into a gargle.

Prurigo. Professor Hebra recommends for the cure warm baths and soap, and after each bath frictions with equal parts of cod-liver oil and pitch. The itching, he says, departs after the second or third application.

Radical Cure of Hernia. At the meeting of the Medico-Chirurgical Society of Edinburgh, on March 6, Mr. Syme introduced a patient on whom he had successfully operated for the radical cure of reducible inguinal hernia. The plan followed was of a simple character, and was thus described. Instead of a complicated apparatus for filling up the inguinal canal, the surgeon only required an elongated body of some kind, such as a piece of bougie, a piece of an œsophagus tube, a bit of wood, or even part of a wax or tallow candle; all the preparation required was, that a hole should be drilled through one end of the body chosen. The remaining apparatus consisted of a piece of strong thread and a needle, such as is used in sewing up dead bodies. The mode of application was as follows:—The string was passed through the hole in the end of the body; the needle was threaded with one end of the string, and laid with its concavity resting on the forefinger of the left hand, which was then passed up along the cord within the external ring; the needle was then turned round, so as to bring its point upwards, and passed, with an inclination to the left, through the textures, and brought out on the surface of the abdomen; the other end of the thread was then passed through the parietes in the same way, only that this time the inclination of the needle was to the right; the two threads were then pulled tight enough to draw the body up the canal, and up it must go. The piece of tube, as in M. Wützer's operation, was smeared with cantharides ointment, to irritate the skin and favour the formation of adhesions. The two ends of the thread were then tied together; and, to prevent any chance of cutting through the skin too fast, a bit of elastic bougie was placed below them. For three or four days, or a week, a compress was placed over the groin, and retained in position by a bandage; and this was the whole process. (*Edin. Med. Jour.*, April 1861.)

Treatment of Wens and some other Cystic Tumours. M. Courty observes that we generally find on tumours, on wens, and often on very large growths, a small black point which indicates the seat of the orifice which was supposed to have been obliterated, but which, in reality, was only obstructed. Nothing is more easy than to remove the obstruction by pressure, or by the action of some chemical or mercurial agent, such as soap, or the point of a pin or needle. The cyst is emptied by this opening, or if such cannot be found, one is easily made, or two, if the cyst be large. The evacuation having been accomplished, two ways may be adopted for obliterating the cavity, either to irritate the interior so as to cause adhesion of the walls, or to destroy it and provoke its exfoliation. The latter is the preferable course. A piece of chloride of zinc paste, of a length proportionate to the capacity of the cyst, is pared down sufficiently to allow it to pass the opening. It is always easy to push it into the cyst, the opening yielding to the pressure. Pressure applied twice a-day gets rid of the purulent matter and of pieces of the cyst. If it be small, one cauterisation is generally sufficient to effect a cure, which generally takes place by the expulsion of the mortified cyst. By means of pressure, the latter may be brought to the opening, and, if necessary, extracted with the forceps. The complete obliteration of the cavity, and the retraction of the skin to its former condition, follow that expulsion. If the cyst be large, we can only count on its gradual expulsion in fragments. The successive introduction of pieces of the caustic, methodical pressure, the precaution of keeping it constantly empty, care to favour the retraction of the skin, and the contact of the opposed surfaces, always succeed in obtaining a result as satisfactory as that when the cyst is small. The treatment occupies from thirty to fifty days, and is never followed by unpleasant consequences. (*Dublin Med. Press.*)

Subcutaneous Injection of Strychine in the Prolapsus Recti of Infants. Early in July, a child of four years old entered the Foundling Hospital with a prolapse of the rectal mucous membrane, existing for many months. The child had three or four semi-liquid stools daily, and at each the mucous membrane protruded to a considerable extent. If it were reduced immediately, no difficulty occurred; but if even a quarter of an hour elapsed, the mucous membrane, being compressed by the sphincter, became blown out, of a crimson colour, and could not be returned without violent efforts and much pain. M. Foucher introduced the syringe-cannula of Wood in the direction of the sphincter, a short distance above the anus, and injected ten drops of a solution of about three grains of sulphate of strychnia to about five drachms of water. In the course of the day, the child experienced no unusual symptom; and at three stools the mucous membrane only descended once. The next day there was no prolapse, and only one on the following. Twenty-four hours afterwards, the surgeon made a fresh injection of forty drops; and from that time, during six weeks that she remained under treatment, there was not one prolapse. On September 10th, the child was taken with chicken-pock and fever; and, during four days of its duration, the mucous membrane descended at each stool, but after her recovery no relapse occurred. (*Dublin Med. Press.*)

New Mode of Preparation of Sulphurous Baths. Under the denomination of *hepar sulphuris*, druggists and bathing-establishments supply the public with sulphuret of soda, or a mixture of sulphuret of soda and of potash. This compound, when recently prepared, has pretty nearly the same virtues as hepar sulphuris, and is less expensive; but it is decomposed in time, becomes efflorescent, and barely tinges the water of the bath. In order to remedy these disadvantages, Mr. Cazac proposes the following plan in the *Journal de Toulouse*:—Quick-lime, 120 parts; sulphur, 250 parts. Mix, after extinction of the lime, in 2,000 parts of water; boil in a cast-iron vessel; and, when the lime and sulphur are dissolved, add 200 parts of carbonate of potash. Filter and evaporate to dryness. A dry sulphuret is thus obtained, equivalent in weight to one-third of the liquid. (*Dublin Hospital Gazette.*)

Chloroform in Poisoning by Strychnia. Dr. M. Schuppert of New Orleans, in the *Medical Times* of that city, publishes a case of the successful use of chloroform by inhalation, in poisoning by strychnia. The patient, a medical man, had accidentally swallowed about a grain of strychnia. The spasms, which are described as fearful, were readily subdued by the chloroform; but it was found necessary to keep the patient constantly under its influence for many hours. About six ounces of chloroform were used in less than six hours.

Treatment of Tinea by Carbonate of Copper. Dr. Huet has made extensive trial of this plan of treatment, and reports very favourably of it. The head is thoroughly cleansed by poultices, and the hair shaved off. After the crusts have been entirely removed, the carbonate of copper is to be applied in the form of an ointment, consisting of one part of the carbonate of copper and fifty parts of purified lard. It is occasionally requisite to suspend the application of the ointment, and to make use of the poultices for a few days before resuming its employment. (*Repertoire de Pharmacie*, Jan. 1861.)

Coal-Tar Soap. Deneaux's coal-tar emulsion is prepared as follows:—Take coal-tar, soap, alcohol, of each two pounds; heat in a water-bath until perfect solution is effected; on cooling, a genuine soap is obtained, soluble in water, with which it forms a durable emulsion. The expense is trifling; six pounds, which would cost 2*s.* 6*d.*, would yield about 100 pounds of emulsion, each quart containing two drachms of coal-tar. (*Dublin Hospital Gazette.*)

British Medical Journal.

SATURDAY, MAY 25th, 1861.

REFLEX PARAPLEGIA.

Admitting the fact of the existence of such a pathological state in the body as is indicated by the term reflex pathology, we must next ask, How is the disease distinguished by its attendant symptoms from myelitis and organic diseases of the nervous centres? In most cases, reflex paraplegia may be characterised as follows:—There is an absence of the special symptoms which indicate organic disease of the spine; the paralysis is incomplete, and has slowly supervened upon an affection of an urinary, a genital, or some abdominal organ, upon inflammation of the lungs or pleura, or after irritation of a a nerve in its trunk or cutaneous ramifications. In most cases of paraplegia, we must form our judgment as to its nature from a consideration of these conditions.

But we will look a little nearer into the distinctions which Dr. Brown-Séquard has collected together and given as characteristic of the two best marked varieties of reflex and centric paraplegia—urinary paraplegia and myelitic paraplegia.

Urinary paraplegia is *preceded* by an affection of the urinary organs. The paralysis is incomplete, and varies in degree with the varying conditions of these organs. The lower limbs alone are usually affected, and the paralysis does not extend upwards. Reflex power is not wholly lost, or is much exalted. Rarely do spasms seize the paralysed muscles; nor is there pain in the spine, nor sense of constriction of the abdomen; neither formication, nor pricking, nor anæsthesia. Rarely is the bladder or rectum paralysed; there is much gastric disturbance; and lastly, recovery often takes place rapidly, after notable amelioration of the urinary affection.

On the other hand, in *myelitic paraplegia*, the affection of the urinary organs does not *precede*, but is a *consequence* of the spinal disease. The paralysis is complete, and is unaffected by changes in the condition of the urinary organs. Other parts besides the lower limbs are usually paralysed, and the paralysis gradually extends upwards. Reflex power is often lost, but sometimes much increased. There are always spasms and some amount of pain; also formication, pricking, etc.; feeling of abdominal constriction, and almost always anæsthesia or numbness. There is no gastric disturbance. The disease usually slowly progresses to a fatal termination, and rarely ever is there complete recovery. Moreover, the urine in myelitis is alkaline; whilst in reflex paraplegia not depending upon urinary diseases it is usually natural.

In considering the *prognosis* of reflex paraplegia, we must, according to Dr. Brown-Séquard, reflect that there are two forms of the affection; that, in one of these forms, the paraplegia depends upon a defect in the nutrition of the spinal cord; and in the other, upon an alteration of nutrition in the muscles of the lower limbs. The first of these forms is almost always curable, provided the external irritating cause be removable. But, in the second case, recovery rarely takes place, even though the provoking cause of the paraplegia be removed; and the reason is, that in this form the muscles have become rapidly atrophied and altered. Hence, as a matter of prognosis, it is always important to know, in a case of reflex paraplegia, whether or not rapid atrophy of the muscles have occurred.

The *treatment*—or, to speak more correctly, the indications for treatment—of reflex paraplegia springs naturally from the pathology of the disease as here laid down. The first indication evidently is to remove the local irritation—the cause of the affection; and this necessarily involves the consideration of the treatment of nephritis, cystitis, enteritis, morbid states of the uterus—in fact, of all those morbid conditions with which the paraplegia may be associated. In carrying out this treatment, we must also endeavour to diminish the sensibility, or interrupt the nervous influence which passes from the diseased organ or nerve to the spinal cord—to paralyse the nervous sensation. For this purpose, says Dr. Brown-Séquard, no narcotising agent is more powerful than belladonna; but, in some cases, caution is required in its use. In disease of the urethra or prostate, one grain of the extract of belladonna in twenty drops of laudanum should be injected into the urethra, and washed away after half an hour or an hour's residence there. This treatment should be repeated every two or three days; thirty drops of laudanum alone being injected on the intervening days. In bladder-disease, the aforesaid solution of belladonna is to be injected after evacuation of the urine; and then the sole laudanum injection on alternate days. Suppositories of these two agents may also be employed.

If the irritation radiate from the vagina or uterus, then a pill of half a grain of belladonna, with one grain of extract of opium, enclosed in a piece of cotton-wool, may be passed well up into the vagina —a practice of M. Trousseau's, which Dr. Brown-Séquard much extols. Should the stomach, or the intestines, or kidney, etc., be the seat of local irritation, then opium should be taken by the mouth.

Dr. Graves has strongly recommended excitants or revulsives to be applied to the skin of the legs; and Dr. Brown-Séquard gives a theoretical explanation of their beneficial mode of action. They produce a *similia similibus* effect. We have seen that the disease, according to Dr. Brown-Séquard, results from a contraction of the smaller blood-vessels; but, if this contraction be considerable, the muscular fibres of the vessels become exhausted, and then (by a well-established physiological law) they are relaxed, and so there follow dilatation of blood-vessels and admission of due flow of blood to the spine. Now, no irritating cause is more powerful in effecting contraction of blood-vessels by reflex action than cold; and, consequently, this sort of excitation, alternated with heat, should be applied to the spine. But, whatever be the kind of excitation employed in this case, it ought to be very powerful, in order to produce that exceeding degree of contractility of muscular fibres which is found, experimentally, to be followed by exhaustion and dilatation.

We fancy that to the theoretical explanation given by Dr. Brown-Séquard (for we must still call it such) of the cause of reflex paraplegia, our readers will not at present be prepared to give their unqualified adhesion. To us, we must say that a tonic permanent spasm of the blood-vessels, such as is supposed by him to be the permanent state of the blood-vessels of some of the nerves or of the spinal cord in reflex paraplegia, is quite incomprehensible; and we think that on this point, which is assuredly the great point of Dr. Brown-Séquard's labours in this direction, he would have done well to have more fully developed the basis of his conclusion. Surely it is not enough to satisfy us on this head, that Dr. Brown-Séquard *has seen* a contraction of the blood-vessels in the spinal cord when "a tightened ligature was placed around the hilus of a kidney". *Permanent* contractions of blood-vessels of this character are surely contrary to what experience teaches us in other cases; and, if they really exist, how comes it that the cord does not become organically affected through such a cutting off of its nutritive supply?

Keeping this idea of the cause of the paraplegia in view, Dr. Brown-Séquard recommends that the patient, during the night, and, as far as may be, during the day, should lie in that position which would favour (by gravity) the flow of blood to the spine. As regards general treatment, this should consist in tonics and generous food; the partially paralysed muscles being as much exercised as possible in the open air.

Strychnia, Dr. Brown-Séquard says, is of the greatest use in this affection. It is the only remedy which really deserves confidence. It increases the amount of blood in the spinal cord, and (acting in a special and direct manner on the tissue of the cord) it increases the reflex faculty; the amount of blood and of the reflex faculty being, as propounded, below par in these cases. It may be given with opium in doses of one-thirtieth to one-fortieth of a grain a day, and, when used alone, in daily doses of one-twentieth of a grain. When employed with belladonna, its dose must be larger, to compete with the antagonistic action of the belladonna. And hot and ice-cold douches may be applied to the spine alternately, to produce that violent degree of spasm of the blood-vessels which is followed by their relaxation.

Besides this, the muscles of the paralysed limbs should be duly exercised, to prevent their becoming wasted and atrophied. It is therefore important to have them galvanised two or three times a week, and the limbs properly shampooed. If necessary, also, the heat of the limbs must be artificially kept up; remembering always that, unless the *primum mobile* of the paralysis—the local irritation—be removed, we can expect no permanent cure.

Now we must say one word on the subject of the therapeutical agencies here so strongly recommended by Dr. Brown-Séquard. He tells us that the principal object of his lectures was to indicate the distinction between the cases of paraplegia in which strychnia or belladonna and ergot of rye ought and ought not to be employed. Now, we feel bound to say that, *clinically speaking*, we do not consider he has satisfactorily made out his case. It may be perfectly true that strychnia increases the amount of blood in the vessels of the cord, and that belladonna and ergot of rye may be powerful agents in diminishing the amount of blood in them; and, indeed, Dr. Brown-Séquard tells us that he has satisfied himself in the most positive manner, by experiments on animals, that the two remedies, belladonna and ergot, are powerful excitants of the unstriped muscular fibres of blood-vessels, of the uterus, bowels, etc.: still we cannot, in this complicated tale of therapeutics, accept it as a fact that one-twentieth or one-thirtieth of a grain of strychnia *per diem* can cure reflex paraplegia by effecting a relaxation of the blood-vessels of the cord. Reflex paraplegia will, admittedly, get well of itself, if the exciting cause of the disease be removed; and the removal of this cause is, of course, always the main point of medical action here.

Then, again, when we consider the smallness of the dose of strychnia recommended, the accompanying treatment, and the time required for the cure of reflex paraplegia, we may surely, and with great justice, hesitate before we accept the cure as a *propter hoc* of the strychnia action. It will also be seen that, in urinary reflex paraplegia, Dr. Brown-Séquard uses belladonna as an injection, together with the strychnia; although belladonna, according to the physiologist, is a direct opponent in action to strychnia. But Dr. Brown-Séquard gets over this difficulty by saying that, when belladonna is employed, the dose of strychnia "must be larger, on account of the antagonistic action of belladonna".

For ourselves, we must repeat that the clinical proof of the excellent effects of these remedies, as laid down here, has yet to be given. Belladonna and ergot of rye diminish the amount of blood in the spinal cord by exciting contractions of its blood-vessels; and, therefore, are powerful remedies in myelitis. *Per contra*, and for a similar reason, they are most dangerous remedies in white softening of the cord and reflex paraplegia. Strychnine, again, is a most dangerous poison, and mercury decidedly injurious, in myelitis; but strychnine is the prince of remedies in reflex paraplegia. We shall hope, at a future day, to see these physiological positions of Dr. Brown-Séquard more fully tried by his further clinical experience.

Without at all doubting the value of the remedies here spoken of in the cases inferred, we think we are fully justified in questioning whether their mode of action is really such as is here suggested. We should be glad to know how Dr. Brown-Séquard would explain such a case as this: Myelitic inflammation of the cord or its membranes does not consist simply in blood-congestion of these parts. The congestive stage ceases, and then come exudation and compression of blood-vessels, and a *diminished supply of blood*; but still myelitis exists. Yet we are told that we must not give strychnia, *because* it increases the flow of blood to the part by relaxing the blood-vessels, which are already compressed by the inflammatory products!

THE WEEK.

At the Royal Society, on Thursday week last, the Croonian Lecture was delivered by Dr. Brown-Séquard. The subject chosen by the lecturer was "The Relations between Muscular Irritability, Cadaveric Rigidity, and Putrefaction". The law enunciated, and which the observations and experiments quoted seem fully to bear out, was this: that, in proportion as the muscular irritability—viz. the capability of a muscle to respond to a stimulus—is greater or less at the time of death, so does cadaveric rigidity come on at a later or earlier period, and last for a longer or shorter time; and so also does putrefaction set in and progress more or less tardily. Wherever there has been great muscular exhaustion previous to death, it is found that but little muscular irritability remains after life, and that rigidity and putrefaction soon come on. In the instance of animals hunted to death, this condition exists. Their muscular energy has been exhausted by their great and long-continued efforts, but little irritability of the muscles remains, *post mortem* rigidity lasts only a short time, and putrefaction soon sets in. It is a well known fact, that the flesh of animals which have been killed in this manner is more tender than that of others; and probably the early period at which incipient putrefaction sets in will account for it. In confirmation of the views of the lecturer, one of the speakers mentioned a circumstance, which had been stated by an arctic traveller, that on one occasion an animal having been chased for a long time, and ultimately killed, it was found after only a few hours in a state of putrefaction, and this with a temperature many degrees below freezing point. The natives said that this was a constant occurrence; and that, whenever animals were killed after a long chase, it was necessary to use them at once for food. The condition which tends most surely to retard putrefaction, is that in which an animal dies without any previous exertion having taken place. Under these circumstances, *cæteris paribus*, muscular irritability lasts long, cadaveric rigidity appears late, and putrefaction sets in tardily and progresses slowly. These facts have most important practical bearings, not only in a medico-legal point of view—for our opinion as to the length of time a body has been dead must be influenced by them—but also with regard to the preservation of the meat which is daily slaughtered for consumption. The practice of driving animals for a long distance to the place where they are to be killed, must tend to exhaust their muscular irritability, and therefore to produce that condition which results in an early putrefaction of their flesh. For reasons, therefore, of economy, no less than of public health, we would direct attention to the law which has been enunciated. The observations of Dr. Brown-Séquard may further serve to explain the statements of those who have thought, from the rapid appearance of putrefaction after death, that in certain cases no cadaveric rigidity takes place; the fact being, however, not that rigidity does not occur, but that it comes on very early, and rapidly passes away.

It is a curious and unsatisfactory truth, that there is no class of educated men who, as a body, exhibit to worse effect in public, whenever they pretend to deal with scientific matters, than members of the clerical profession. Of all kinds of quackery they are notoriously the promoters and leaders. The best non-professional patrons of homœopathy, of Mesmerism, of table-turning, spirit-rapping, and all such like delusions, are gentlemen who have been educated at Oxford or Cambridge for ecclesiastical purposes. The living grandfather of logicians, from his throne in Dublin, encourages clairvoyance, Mesmeric hospitals, and, judging from his antecedents, very probably homœopathy and the rest of these sort of things. Then, from him downwards, through the length of the land, we find his smaller brethren walking in his *logical* footsteps. The last exhibition of lamentable ignorance and worse than bad taste from these quarters, is on the part of a Rev. Lord—

of him of Auckland, Bishop of Bath and Wells. At a meeting of "the Royal Society for the Prevention of Cruelty to Animals", the Rev. Father is thus reported:—

> "He then went on to discuss the question of vivisection, remarking that, although he would not authoritatively assert that no new discovery had resulted from the practice, yet he was sure that a great deal of needless cruelty was perpetrated in the name of science. John Hunter, Sir A. Cooper, Sir Chas. Bell, Dr. Reid, and others had practised vivisection; but the discoveries to which the practice had led were so unimportant, that they offered no justification for the cruelties committed. Dr. Reid on one occasion had been very ill, and had been obliged to submit to several very painful operations, which he (the doctor) almost regarded as judgments on himself for the cruelties he had, by vivisection, inflicted on the brute creation."

Could ignorance go beyond this? Neither Hunter, nor Bell, nor Brodie, nor John Reid, etc., has made any important discoveries! Only such ignorance as this could have had the presumption, under the clerical cloak, to call the profession to account for the practice of vivisections. And then to refer to the lamentable and most painful death of the late Dr. John Reid, from cancer of the tongue; and dare to insinuate that his painful death was a kind of retribution for the experiments he had performed on animals! Could any exhibition of arrogance and ignorance exceed this? We are, ourselves, no admirers of vivisections, and have, on more than one occasion, ventured to doubt whether they are justifiable; and we should therefore gladly hear the question fairly argued. We must, however, enter our protest against this kind of arguments to the person; they are justifiable neither in reason nor in courtesy. Let us argue the case as it now stands before us, and in accordance with the feelings of the days in which we live. Let us argue whether vivisections, under any circumstances, are justifiable; and if they be so, then let us determine under what circumstances. But do not let us presume to question the conscientious doings of others, or to take the thunderbolts of Jove into our own hands, like the Bishop of Bath and Wells.

A remarkable movement is at present taking place in the syphilographic world. Large treatises (new editions) on this subject have lately appeared in this country; and we now find that Dr. Robert, surgeon of the Hôtel Dieu, of Marseilles, has just added another enormous volume to our stock of knowledge on the subject. The work consists of 800 closely printed pages. A French critic thus speaks of it:—

> "The work of M. Melchior Robert clearly marks the independent path of progress in which syphilography is now engaged. Rarely has a writer ever been placed in a better position for observation than the author of this *New Treatise on Venereal Diseases*. The work is perfect, thanks to the erudition of the author, and not less is it original, thanks to his long practice. There is not a single problem, in which we do not see marked the man who has seen much and reflected much, who knows all the different solutions of it which have been proposed; and has fixed his choice only after having exhausted all the means of clinical verification, experiment, and controversy. Nothing has been omitted, nothing curtailed, by this conscientious specialist. Of theoretical questions most successfully attacked by him, we may enumerate the following:—The Duality of the Virus of Chancre; Mixed Chancre; Secondary Contagion; the Initial and Definitive Form of the Accidents transmitted by Secondary Accidents; the Unity, the Curability of Constitutional Syphilis, etc."

The warlike notes from America sound louder and louder. The whole of the editorial department of the *American Medical Times* of the 4th inst. is occupied with military affairs. Scientific meetings, and science, and progress must, in the meantime, stand still. We read, for example—

> "The American Medical Association will be compelled to postpone its meeting at Chicago, as the Sanitary Convention has already decided to do. The entire North is waiting orders to shoulder arms, and the unhappy South is already in arms. No conventions except for war or for conciliation can be held."

Such is the pass to which our profession has come in America.

We are sure our readers will enjoy the following thoroughly "illigant" sketch of the British Medical Association, taken by a fervent Irish artist; and we sincerely trust that the editor of the *Dublin Medical Press* will forgive us for allowing him to dance, as follows, in our pages, for their amusement:—

> "A Prodigious Editor. The conductor of an English journal, established for the special easement of those who pay for it, falls foul of us for resenting a rude and unhandsome attack on an Irish physician who ventured to make a communication to one of the London Medical Societies, at variance with the views entertained by certain rampant gentlemen of the quill abiding therein. He tells his employers in his chapter of twaddle, appropriately entitled an olla podriga, that we commit 'absurdities' when we denounce combined attacks on individuals in public places because they presume to enforce doctrines 'which are well known, and more than five hundred years old.' He tells them, too, that if we 'had read the paper in question, we should have come to a very different conclusion', thus endorsing the offensive and disparaging observations expressed by the parties called to account for their arrogance. Such abortive attempts at editorial display and absurd assumption of lofty airs may perhaps go down with the class of readers addressed; but they are somewhat out of character when emanating from one so unable from his obligations to pronounce an unbiassed opinion on such matters. The Editor of the *British Medical Journal* should recollect that as the mere agent of a body of men publishing a journal for their own benefit, and to promote their own interests, he is not in a position to dictate to the unshackled members of a free press; he must do as he is bid, and he has done so. In the exuberance of his zeal he charges us with 'fostering national prejudices' at the very moment that he is nettled at our exposure of them, and feels that his clients are open to censure on this score. Whatever feelings we may entertain in Ireland respecting our British brethren, it is not one of prejudice; that we leave to them, and well do they show it as regards Irish men and Irish institutions. It is not by open and straightforward retaliation or rebuke that vulgar prejudices are fostered, but by mean participation

in the feelings and motives which lie at the bottom of them, and systematic flattery of those who indulge in such gratification of personal vanity and gratuitous assumption of superiority."

A few weeks ago, we stated in this Journal, on the authority of the *Times* (Jupiter), that Rokitansky had been raised from the scene of his glory in the *Todtenzimmer* to a seat in the "Upper House"; and, thereupon, we congratulated the Vienna great ones in being in advance of our governing folk. The *Medizinische Wochenschrift* tells us, however, that we have got hold of an untrue tale:—

> "Our colleagues on the other side the water need not be envious of any advantage that we have over them. Rokitansky is far enough away from the House of Lords. We should, in the meantime, be very well contented if, in our social position, we everyway stood on a level with them—free citizens of England!"

The following very sensible remarks in the *Moniteur des Sciences, etc.*, on the absurdity of the term allopathy, as well as of that of homœopathy, are worthy the attention of all who make use of them:—

> "The terms homœopathy and allopathy are absurd, etymologically and rationally. I deny the existence, in a scientific sense, of both homœopathy and allopathy. The distinction reminds me of that made by a candidate for honours, who divided mankind into the human and the inhuman. Those who call themselves homœopaths, or who speak of homœopathy, know not what they say, or rather only understand it as being a means of obtaining practice. To give up the term of homœopath is an act of sense. The epithet is, in fact, a party sign, and in medicine, if we tolerate errors, we are not fond of banners. When the party colours are removed, then we find ourselves face to face with the so-called law of *similia similibus*, and of infinitesimal doses—in fact, with an old tradition. For these questions have both been judged ages ago; the first, under the names of enantiosis and hypenantiosis (and on this point references may be made to the translation of Hippocrates by M. Littré, vol. iv, p. 420); and the last, carried to extremes, that is, in its actual sense of infinitesimal, is *à priori* manifestly absurd; but, in a restricted sense, has been frequently studied in materia medica. I prefer, as a mental phenomenon, a belief in spirit-rapping to a belief in homœopathy; for the spirit-doctrine is clear, it has existed at all times, we can follow its origin and phases, and may admit it without being taxed with ignorance or bad faith; but homœopathy is a thing without existence. There are homœopaths, but not homœopathy."

We find in the *Moniteur des Sciences Médicales* a curious instance of the wretched condition of the French press at this moment. The *Revue d'Autun*, a non-political journal had the audacity to touch upon a subject affecting the municipal administration of the town, and, in consequence, has been suppressed, "for treating without authority of matters of politics or social economy." The editor goes on to state that nothing is more elastic than the meaning of the latter of these terms; and that under it may easily be included questions of this kind: the healthiness of the water of Paris, lunatic asylums, hospital management, etc. It is true that journals are permitted to discuss these questions; but tolerance is not right, and a journal which freely treats of them one day may find itself suppressed the next.

> "This is the reason," he goes on to say, "why numerous questions of the above nature, which would find a more appropriate place in scientific journals than elsewhere, are allowed to rise and perish without our joining in the debate which they excite."

It requires from an Englishman an effort of the imagination to realise such a position of the press. Another journal, *L'Union Médicale*, tells us that it dare not say a word about a pamphlet which has just been published, in which the rights of medical men are attacked, and insanity is treated of; it dares not, because it is stamped! and "thereby indicates that it treats of politics or of social economy!"

The public do not seem to understand, or, at all events, to appreciate, as yet, the advantages offered them at the hands of our public analysts. On this head, Dr. Letheby, speaking of the city of London, writes as follows:—

> "Only three applications have been made during the quarter for examination of articles of food suspected to be adulterated. All of these were for the analysis of bread. In two cases the loaves were genuine, and in the other case the bread was adulterated with alum, and was made of very inferior flour. So little are the public alive to the importance of this Act of Parliament, that Dr. Letheby expresses his fears that it will not become of much use unless a series of systematic investigations be instituted."

As regards the analyses of bread for alum, we may remark that the analysis, according to chemical writers, is full of difficulty; that mistakes have been frequently made—alum having been stated to be present in bread which did not contain a particle of it; and that the process which secures a true conclusion is very long, and somewhat difficult of execution. This we learn from the *Chemical News;* and it is worthy of attention. If it be true, the idea we most of us have, namely, that the presence of alum in bread is very easily ascertained, is altogether a mistake.

The *American Medical Times* gives the following satisfactory account of the medical department of the American army:—

> "The crisis in our national affairs which is about to culminate in the active employment of the army, will lead to a more careful scrutiny of its several departments as regards their proper organisation for efficiency. There is one branch of this service in which our profession is especially interested, viz., the medical department.
>
> "We believe it is generally admitted by our military authorities that the medical department of the army is under the most complete and thorough discipline. The officers comprising the medical staff are recognised as among the most intelligent of the army. This is due

to the rigid system of examination which each candidate for a surgeoncy has to pass before he receives his appointment. The examination is not limited to medical qualifications simply, but embraces so wide a range of subjects as to test most effectually the general educational character of the applicant. This process has contributed to sift the medical candidates, and lead to the selection of only those who are the best qualified to give character and efficiency to this branch of the public service.

"The devotion of our army surgeons to the severely trying duties which often devolve upon them, is always commended by superior officers. Stationed, as the large majority are, at distant frontier outposts, often beyond the bounds of civilisation, and frequently in unhealthy districts, not only are the deprivations great, but the care of the sick imposes constant watchfulness and extreme fatigue. Many have thus lost health, and some life, by the physical hardships which they have had to endure. The army surgeon holds no sinecure; and if there is any branch of our military service which deserves the favourable consideration of government, it is that devoted to the preservation of the health of our troops.

"It is gratifying to know that the pay of army surgeons, as established by a recent Act of Congress, is entirely satisfactory to the members of that department, as is also the rank of surgeons. This is necessary to give that stability to the service so essential to its efficiency. There should be added, however, to the conditions of compensation, a retiring pension for those disabled in the service."

THE following account has been given by the Registrar-General for Scotland, who having hitherto issued no detailed annual reports, has just commenced the series, beginning with his first year of office, 1855.

"Taking first the births, the superintendent of statistics calls attention to the circumstance that the proportion of boys born to girls is greater in the rural districts than in the towns, in which, indeed, in that year the illegitimate boys born were absolutely fewer in number than the girls. This is attributed to a residence in towns weakening the physical strength of parents, and it is considered a rule so established as to 'afford a valuable hint to those who desire male progeny.' With reference to incontinence, the report states that it is found most prevalent in those districts in which farm work is done by unmarried young men and women, who sleep in the farmhouse, or sometimes in bothies set apart for that purpose. It is contended that in many of the irregular connexions which too often in Scotland are substituted for marriage, the parties are true to each other, and that, indeed, the vice of unchastity seems greatly owing to the excess of a Scottish virtue, for the proportion of illegitimate births is highest where the test of signature of the marriage register indicates the greatest prevalence of education, and where, therefore, it may be supposed that the prudential check operates most to prevent improvident marriages. It would appear, from the year's returns, that though marriages are much fewer in Scotland than in England, yet when Scotchwomen do marry they are more prolific than the English. Some rather curious matrimonial statistics are supplied. It is remarked that widows marrying bachelors, selected, as a general rule, husbands younger than themselves; the *status* which the widow had acquired by her former marriage presented inducements to the unsettled bachelor, which gave the widow a great advantage over her unmarried sisters; and as power is dear to every heart, a younger member of the opposite sex was selected, as more likely to leave that power in her hand than if the chosen second husband had been her senior in years."

MM. COMMAILLE and Lambert, *pharmaciens* attached to the French army occupying Rome, have well occupied their time in investigating the chemical characters of the waters in the environs of Rome. The classic streams have had to tell the very unclassical tale of their chemical composition. "Sooner or later, the French army must quit Rome; and what will remain of the twelve years of occupation? What remains of the Egyptian and Crimean expeditions? A page in history. Savants, however, who accompany the army, point out to us the riches of Nature and Art; and thus we obtain a conquest pacific, civilising, eternal, *monumentum perennius œre*"—so, at least, says our French critic, *à propos* of the *pharmaciens*' chemical analyses.—M. Cloquet, "the illustrious surgeon, and so long the brilliant clinical teacher, with a heart filled with noble *souvenirs*," remembering that his first years of study were passed at the Val-de-Grâce, resolved to revisit that school. He was received like royalty by Professor Legouest and the students; and, after visiting the wards, etc., assisted at the lecture of M. Legouest, and then himself said a few words to the audience. He had dissected the first time here in 1808, under the elder Devilliers. He presented the school with thirty-six rare volumes.—M. Sailly has carefully investigated the condition of the urine in thirty persons affected with epilepsy, his object being to ascertain the difference between the urine of epileptics and the urine of women suffering from puerperal convulsions. Here are the distinctions: When the puerperal convulsions attack the woman, the urine is scanty; in some cases there is scarcely any in the bladder. It is also invariably albuminous, and especially so at the moment of the attack. On the other hand, in epilepsy the urine is natural in quantity, and does not contain albumen, unless the patient have Bright's disease.—M. Reynal, Professor of Veterinary Surgery at Alfort, has been elected a member of the Academy of Medicine of France. "We know not", says the *Moniteur des Sciences*, "whether or not he loves the rhetorical art; but this we know, that M. Reynal will not, as so many do, always think his individuality is being brought upon the scene. Nothing is more objectionable in the Academy than a mania for glory and a mad longing for persecution."—M. Bourguignon has read a memoir to the French Academy of Medicine on a new disease, which he calls *malaria urbana*, or the functional disturbances produced by too lengthened a sojourn in large towns.—An epidemic of demonomania has been raging for some time in the district of Thorion, in Savoy. The Minister of the Interior has sent Dr. Constant, Inspector-General of Lunatic Asylums, to the affected quarter, to make investigations into the matter.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

LIST OF SUBSCRIPTIONS FOR 1861.

The first List of Subscriptions paid for the present year will be published next month. It is therefore particularly requested that the Treasurer may receive all moneys in hand by the first day of June, after which date it becomes the duty of the General Secretary to apply to every member whose subscription has not been received.

Philip H. Williams, M.D., *General Secretary.*

Worcester, May 21st, 1861.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. [Special General.]	37, Soho Square.	Tuesday, June 4th, 4 p.m.
South-Western. [Annual.]	Rooms of the Royal Institution of Cornwall, Truro.	Wednesday, June 5th, 3 p.m.
East Anglian.	Norfolk and Norwich Hospital.	Friday, June 28th, 2 p.m.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-fifth Annual Meeting of this Branch will be held at the Medical Institution, Mount Pleasant, Liverpool, on Wednesday, June 5, under the presidency of Edward Batty, Esq.

Gentlemen who intend to read papers, are requested to send notice to the Honorary Secretary as early as possible.

A. T. H. Waters, M.R.C.P., *Hon. Sec.*

Liverpool, May 1st, 1861.

NEW MEMBERS OF THE ASSOCIATION.

The following gentlemen have joined the Association from the commencement of the present year.

BERKSHIRE.

Parker, Charles G., Esq., Shrivenham
Sheppard, H. H., Esq., Sonning

BUCKINGHAMSHIRE.

Heygate, William, M.D., Newport Pagnell
Webster, F. R., Esq., Wolverton

CHESHIRE.

Ransome, Arthur, M.B., Bowden
Merriman, Charles A., Esq., Knutsford

CORNWALL.

Felce, Stamford, L.R.C.P.Ed., Launceston
Plowman, William T., M.D., St. Austell

DEVONSHIRE.

Ackland, W. H., Esq., Bideford
Bell, James, L.R.C.P.Ed., Broadclyst
Hill, James P., Esq., Churchinford

DORSET.

Norris, Henry F., Esq., Charmouth

DURHAM.

Oldham, Riton, Esq., West Hartlepool

GLOUCESTERSHIRE.

Cooper, G. K., Esq., House-Surgeon to the Royal Infirmary, Bristol
Grace, Henry, Esq., Bristol

KENT.

Bowles, Robert L., Esq., Folkestone
Boycott, Thomas, M.D., Canterbury
Carr, William, Esq., Blackheath
Henty, George, M.D., Sittingbourne
Hoffman, George H., Esq., Margate
Lowry, Thomas H., M.D., Town Malling
Parkes, Edmund A., M.D., Professor of Hygiene in the Army Medical School at Chatham, Frindsbury, Rochester
Price, William P., M.D., Surgeon to the Infirmary for Scrofula, Margate
South, John Flint, Esq., President of the Royal College of Surgeons of England, Blackheath Park
Tassell, Robert, Esq., Canterbury

LANCASHIRE.

Garthside, James, Esq., Liverpool
Longton, Edward J., M.D., Southport
Maudsley, Henry, M.D., Superintendent of the Royal Lunatic Asylum, Cheadle
Murray, Charles, Esq., Oldham

LEICESTERSHIRE.

Wood, Robert H., Esq., Surgeon to the Dispensary, Leicester

LINCOLNSHIRE.

Brooke, Thomas T., Esq., House-Surgeon to the County Hospital, Lincoln

MIDDLESEX.

Babington, C. Metcalfe, F.R.C.P., Assistant-Physician to the Hospital for Sick Children, 29, Hertford Street, May Fair
Barclay, Andrew W., M.D., Assistant-Physician to St. George's Hospital, 23a, Bruton Street
Beale, Lionel John, Esq., 108, Long Acre
Blenkins, George E., Esq., Surgeon-Major Grenadier Guards, 9, Warwick Square, Belgravia
Brown, Charles Blakeley, M.B., Physician to Queen Charlotte's Lying-in Hospital, 38, Hill Street
Burrows, George, M.D., F.R.S., Physician to St. Bartholomew's Hospital, 18, Cavendish Square
Chambers, Thomas King, M.D., Physician to, and Lecturer on Medicine at, St. Mary's Hospital, 1, Hill Street
Chowne, William D., M.D., Physician to Charing Cross Hospital, 8, Connaught Place West
Cooper, W. White, Esq., Surgeon-Oculist in Ordinary to the Queen, and Ophthalmic Surgeon to St. Mary's Hospital, 19, Berkeley Square
Cotton, Richard Payne, F.R.C.P., Physician to the Brompton Hospital for Consumption, 46, Clarges Street
De Morgan, Campbell, Esq., Surgeon to the Middlesex Hospital, 51, Upper Seymour Street
De Mussy, H. Gueneau, M.D., 4, Cavendish Place
Edmunds, James, Esq., 2, Spital Square
Edwards, Thomas E., Esq., 28, Gloucester Crescent North, Westbourne Park
Gay, John, Esq., Surgeon to the Great Northern Hospital, 10, Finsbury Place South
Goodfellow, Stephen J., M.D., Physician to, and Lecturer on Medicine at, the Middlesex Hospital, 5, Savile Row
Halford, George B., M.D., Lecturer on Anatomy at the Grosvenor Place School of Medicine, 17, Victoria Square
Hare, Charles J., M.D., Physician to University College Hospital, 41, Brook Street
Hewitt, W. M. Graily, M.D., Lecturer on Midwifery at St. Mary's Hospital, 36, Berkeley Square
Hill, Thomas H., Esq., 1a, Sussex Terrace, Hyde Park Gardens
Hood, Peter, Esq., 15, Lower Seymour Street
Hulke, John W., Esq., Assistant-Surgeon to King's College and the Royal London Ophthalmic Hospitals, 10, Old Burlington Street
Lane, James R., Esq., Surgeon to St. Mary's and the Lock Hospitals, 1, Grosvenor Place
Lawson, George, Esq., Surgeon to the Great Northern Hospital, 63, Park Street
Lee, Henry, Esq., Surgeon to King's College and the Lock Hospitals, 9, Savile Row
Martin, Robert, M.D., Assistant-Physician to St. Bartholomew's Hospital, and Warden of the College, St. Bartholomew's Hospital
Meryon, Edward, M.D., 14, Clarges Street
Murchison, Charles, M.D., Physician to the London Fever Hospital, 79, Wimpole Street
Pollock, George D., Esq., Assistant-Surgeon to St. George's Hospital, 27, Grosvenor Street
Pyle, John, Esq., 56, Oxford Terrace
Sanderson, Hugh J., M.D., 24, Upper Berkeley Street
Sansom, Arthur E., M.B., Park Lodge, Fulham
Sercombe, Edwin, Esq., Dental Surgeon to St. Mary's Hospital, 49, Brook Street
Smith, Protheroe, M.D., Physician to the Hospital for Women, 25, Park Street
Solly, Samuel, Esq., F.R.S., Surgeon to St. Thomas's Hospital, 18, St. Helen's Place
Tanner, Thomas H., M.D., Assistant-Physician to King's College Hospital, 10, Charlotte Street, Bedford Square
Wadham, William, M.D., 12, Park Lane
Weber, Frederic, M.D., Assistant-Physician to the Middlesex Hospital, 44, Green Street
Wells, T. Spencer, Esq., Lecturer on Surgery at the Grosvenor Place School of Medicine, 3, Upper Grosvenor Street

NORTHAMPTONSHIRE.

Skinner, Sylvester R., Esq., Daventry
Swann, F. B., Esq., Weedon
Walker, William H., Esq., Bugbrooke

NOTTINGHAMSHIRE.

Littlewood, Joseph, Esq., Resident Surgeon to the General Hospital, Nottingham
Marsh, John C. L., M.D., Nottingham
Wood, William, Esq., Nottingham

SHROPSHIRE.

Fulcher, George A., Esq., Clun
Hughes, John, Esq., Bishop's Castle
Kempster, William N., Esq., West Felton
Large, Joseph, Esq., Oswestry
Moorhouse, James W., Esq., Ellesmere
Oliver, Richard, M.R.C.P., Resident Physician to the Lunatic Asylum, Bicton
Weston, Robert P., Esq., Wellington

SOMERSET.

Alford, Henry J., Esq., Surgeon to the Taunton and Somerset Hospital, Taunton
Bridge, S. T., M.D., Wellington
Cordwent, George, M.D., Taunton
Cornish, Charles H., Esq., Surgeon to the Taunton and Somerset Hospital, Taunton
Day, William W., Esq., Long Ashton
Fowell, Samuel, Esq., Milverton
Hawkins, J., Esq., Stogumber
Liddon, William, Esq., Taunton
Martyn, Richard W., Esq., Martock
Mortimer, Robert, Esq., Bishop's Lydiard
Norris, Hugh. L.R.C.P.Ed., South Petherton
Olivey, Hugh P., Esq., North Curry
Silke, W. Murray, Esq., Nether Stowey
Smith, Robert A., Esq., Taunton
Stockwell, Thomas G., Esq., Surgeon to the Eastern Dispensary, Bath
Stringfield, Joseph, Esq., Weston-super-Mare
Stuckey, George, Esq., Martock
Walter, W. W., Esq., Stoke-under-Ham

STAFFORDSHIRE.

Bury, George, Esq., The Lozells, Handsworth
Cooke, William H., M.D., Aldridge
Dunn, Frederick, Esq., Wolverhampton
Horton, H., Esq., Wednesbury
Jackson, Thomas V., Esq., Wolverhampton

SUFFOLK.

Day, William H., M.D., Newmarket

SURREY.

Hallowes. Frederick B., Esq.. Redhill
Soper, William, Esq., Guy's Hospital

SUSSEX.

Gravely, Thomas, Esq., Cowfold
Smythe, Lewis, M.D., Lewes
Weekes, W. H. Carlile, Esq., Hurstpierpoint

WARWICKSHIRE.

Bartleet, Thomas H., M.B., Birmingham
Bullock, Thomas W., Esq., Warwick
Candy, John, Esq., Alcester
Clayton, Mark H., Esq., Birmingham
Garner, John, Esq., Resident Surgeon to the Dispensary, Birmingham
Goodall, William P., Esq., House-Surgeon to the General Hospital, Birmingham
Savage, T., Esq., General Hospital, Birmingham
Schofield, W. J. J., Esq., Highgate, Birmingham
Smith, George, Esq., Birmingham
Waterson, John, Esq., Birmingham

WILTSHIRE.

Bleeck, Charles, Esq., Warminster
Fowler, Richard, M.D., Consulting Physician to the Infirmary, Salisbury

WORCESTERSHIRE.

Dunn, George P., Esq., Fakenham
Hewitt, F. H., M.D., Worcester
Osborn, Ashby G., Esq., Stourbridge

YORKSHIRE.

Cleaton, John D., Esq., Medical Superintendent of the West Riding Asylum, Wakefield
Wood, Wm., M.D., Surgeon to the House of Correction, Wakefield

WALES.

Barrett, Thomas B., Esq., Welshpool
Davies, William A., Esq., Llanidloes
Robertson, —, M.D., Llangollen
Rowland, John, Esq., House-Surgeon to the Infirmary, Bangor

IRELAND.

Cruise, F. R., M.B., Dublin
Currey, John E., M.D., Lismore
O'Neill, Edward J., M.D., Dublin

ARMY AND NAVY.

Ryan, E. T., Esq., Assistant-Surgeon H.M.S. *Pembroke*
Williams, J. J. P., Esq., 1st Battalion Rifle Brigade, Aldershot
Wrench, E. M., Esq., 12th Light Dragoons, Leeds

INDIA.

Chuckerbutty, Soorjo Coomar G., M.D., Calcutta
Thring, R. S. O., M.D., Surgeon Bengal Medical Service, Roorkie

Special Correspondence.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Liverpool is remarkable for the number of its charitable and benevolent institutions, and for the suitableness of the buildings devoted to these purposes. Amongst the numerous establishments of one kind or another for the alleviation of distress, the medical charities constitute a prominent and important feature.

Of these, the oldest and most extensive is the *Royal Infirmary*, originally instituted in 1789; the present spacious and handsome edifice of stone having been erected in 1824. It consists of a centre and two receding wings, two hundred and four feet in length. The front is one hundred and eight feet in depth; and in its centre is a noble portico of six massive columns, of the Ionic order, supporting a frieze and boldly projecting cornice, with corresponding pilasters at each extremity; and the wings are twenty-six feet deep. The building comprises three lofty stories, having one hundred and thirty-eight windows in front; and the whole, from the chaste elegance of its design, produces a grand and pleasing effect. The internal arrangements are very complete, and well calculated to meet all the requirements of a large general hospital. The beds, two hundred and twenty-eight in number, are divided between medical and surgical cases; fever and infectious diseases not being admitted.

In the women's medical ward there are at present several cases of chorea under treatment with sulphate of aniline—a medicine recently introduced here by Dr. Turnbull, one of the physicians of this institution. It is an artificial alkaloid, existing together with other alkaloid bodies in an old antispasmodic remedy, "Dippel's oil", the properties of which may be in part due to aniline. Dr. Turnbull has given this new remedy in several cases of chorea, with great apparent benefit; including one of extreme severity, where all the usual aperient and tonic treatment and the shower-bath had failed to produce the slightest improvement. When administered for a considerable period, or in large doses, it often causes a peculiar blueness of lips. The dose is about two grains.

A curious and interesting case was lately admitted into the accident ward. A man was bitten by a horse at the bend of the arm. The soft parts were fearfully lacerated, the main nerve and artery being completely dissected out and exposed to view. The artery had been pinched between the animal's teeth in such a manner as to rupture the inner and middle coats of the vessel, leaving the outer fibrous coat entire. The circulation through the limb was thus wholly interrupted; and the parts supplied by the branches of the median nerves were benumbed from the loss of nervous supply. Mr. Bickersteth, who had charge of the case, placed a ligature above and below the point of injury in the vessel. The wound was dressed in the ordinary way, and there appears a fair chance of saving the limb.

Tuesday is the day fixed for operation; and a blank day rarely occurs. On my last visit, Mr. Bickersteth excised the knee-joint, for caries of the ends of the tibia and femur, in a lad about eighteen years old; and also removed a recurrent fibrous (non-malignant) tumour, of about the size of a large potato, from the back of a middle-aged man. The morbid growth, which was of three months standing, sprang from the dense fascia covering the latissimus dorsi, sending a prolongation pretty deeply down between the fibres of that muscle. Mr. Bickersteth remarked that, although this was the first time the tumour had been operated upon, there was every reason to anticipate that it would not be the last; for this class of tumours, as their name implies, although not malignant, almost invariably return again and again after removal. Both patients were under chloroform, which at this hospital is administered simply on lint, without any complicated apparatus—a mode of proceeding which finds favour with most operators here with whose practice I am acquainted, and which, after much experience in the use of chloroform, I am disposed to consider a perfectly safe and convenient mode of producing anæsthesia.

On the same day, Mr. Long operated for the radical cure of hernia, adopting the proceeding known as Wood's modification of the original operation. The patient was advanced in years; the hernia was scrotal, and on the right side. Chloroform was dispensed with, in accordance with the patient's own request.

In the immediate neighbourhood of the Royal Infirmary, forming a part of its general establishment, managed by the same committee, are situated the *Lunatic Asylum* and the *Lock Hospital.*

The Lunatic Asylum affords accommodation for thirty-two patients of each sex, and is surrounded by gardens and airing-grounds about four acres in extent.

The Lock Hospital has a medical staff distinct from that of the Infirmary, and contains sixty beds. Here syphilis may be seen in all its forms and phases.

Besides the Infirmary, we have two other general hospitals. The *Northern Hospital*, a handsome building in the Elizabethan style, situated in close proximity to the Docks, in the northern quarter of the town, contains one hundred and twenty-five beds. Fractures of almost every variety, and other serious injuries, so frequently occurring to those employed about the docks and shipping, constitute the bulk of the surgical cases; while, in the medical wards, seamen and foreigners are admitted in considerable numbers, presenting types of disease not commonly seen in other hospitals; so that, although the number of beds is much smaller than at the Infirmary, there is perhaps a greater variety, and certainly a larger proportion of acute cases, both medical and surgical.

In one ward, under the care of Dr. Waters, is a case of disease of the mitral valve, in a comparatively incipient stage, the remains of an attack of acute rheumatism four years previously. A *bruit* can be heard distinctly over the apex of the heart, and in the direction towards the axilla; but over the base of the heart, and in the course of the aorta, the sounds are normal. The patient, aged about 24, is a stout man, presenting no appearance of disease, nor any rational symptom referrible to the heart; which renders the case an interesting illustration of the importance, in a practical point of view, of physical diagnosis and careful investigation.

A second case of much interest is that of a sailor, about 46 years of age, who, on admission, complained of cough and debility, and who presents no striking symptoms except a peculiar ringing cough, and well marked anxiety of countenance. On careful exploration of the chest, Dr. Waters discovered circumscribed dulness a little above the left mamma, and in the same position a distinct external impulse could be felt. It is probable that this will turn out to be a case of thoracic aneurism.

A third case is that of a young man, who received a blow on the head about a month before his admission; but from which he suffered no immediate ill effects. He now, however, has complete anæsthesia of the left arm and leg, the corresponding half of the face and tongue, partial ptosis, and impaired power of motion on the same side; the loss of sensation being confined to the extremities, and remaining unimpaired on the surface of the body.

The *Southern Hospital*, containing one hundred and twenty beds, is a compact, well arranged building of one story only; the surgical wards being on the ground floor and the medical wards over them. This hospital is at present closed, for the purpose of undergoing a process of thorough purification after the distressing outbreak of typhus, of which we have lately heard and read so much, and concerning which a variety of opinions has been expressed. The perplexing circumstances consist in the fact, that the Egyptian sailors, who communicated typhus to so many individuals with whom they came into contact, were suffering, not from fever, but from dysentery; and further, that in the instances occurring at the Public Baths, the attendants contracted typhus fever from other individuals belonging to the Egyptian crew, who came to bathe, and who were themselves free from disease.

In an interesting letter, lately published in a contemporary (the *Medical Times and Gazette*), Dr. Cameron offers what appears a satisfactory solution of this medical paradox. He says, that there exists a relationship between typhus and dysentery, and, under certain circumstances, a convertibility of the one into the other. He quotes Dr. Copland, to show that the same poisonous exhalations which produce dysentery in the dark races, give rise to typhus in Europeans. He thinks the occurrence at the Public Baths may be accounted for in accordance with the well known physiological law, which has recently been clearly exemplified in the experiments of Claude Bernard; namely, that, within certain limits, the poisonous action of vitiated air may be resisted, when the living organism is brought gradually under its influence. Dr. Cameron applies this to the case in point, by observing, that the attendants of the baths were in the position of individuals in perfect health, suddenly brought into contact with others, who were saturated with and exhaling the poisonous miasm, to the noxious influence of which they had from gradual exposure become insensible. These views may, I think, be accepted as a probable explanation of this somewhat mysterious occurrence, in preference to the suggestion of a correspondent of the London *Times*, who thinks that the Egyptians must have had fever while in the hospital here, but that it was not recognised by the medical staff on account of the colour of the skin, and the impossibility of making out the symptoms through ignorance of their language. The medical officers of the Southern Hospital, in common with most practitioners who have resided long in Liverpool, are too familiar with typhus to have much difficulty in recognising that disease.

[*To be continued.*]

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, May 14th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

Immediately after the reading of the minutes and their confirmation, Dr. O'Connor entered the room, and, addressing the President, said that he was anxious to enter his protest against the confirmation of the minutes. Having been informed by the President that he was too late to offer any observations upon the subject, Dr. O'Connor said that he regretted this, inasmuch as he wished to bring before the Society a very serious breach of etiquette upon the part of a gentleman whose paper had been read at the last meeting of the Society. That gentleman had advertised his article in the daily papers, and used the name of the Society in a most unwarrantable manner. Dr. O'Connor, however, was prevented from entering into particulars by loud cries of "Order!" and "Chair, chair!"

RESEARCHES ON ASPHYXIA; WITH OBSERVATIONS ON THE EFFECTS PRODUCED BY THE HOT BATH IN ASPHYXIATED ANIMALS, AND ITS USE IN RESTORING SUSPENDED ANIMATION. BY A. T. H. WATERS, M.R.C.P. (LIVERPOOL.)

[*Communicated by* Dr. Sharpey.]

Amongst the numerous researches which had been made with reference to asphyxia, the author was not aware that any had been directed to one of the subjects he had investigated. Physiologists are agreed as to the order in which the arrest of the vital actions takes place in asphyxia, but not as to the duration of the heart's action, nor yet as to the best mode of treatment in suspended animation. The different societies, whose aim is to save life, issue rules of the most opposite character for the restoration of those apparently dead.

Two important points remain to be decided: first, the period after asphyxia has commenced during which treatment is likely to be successful in restoring animation; and, secondly, the value of the hot bath as a remedial agent.

Experiments had been instituted by the author with reference to the following questions:—

1. How long does the heart continue to beat in asphyxia?

2. What are the effects of the hot bath on an asphyxiated animal—firstly, after all respiratory movements have ceased, and are not re-excited; secondly, when respiration has been re-excited, and is being feebly carried on?

It is difficult to decide with any degree of certainty with regard to the first question. Certain circumstances tend to throw a doubt on the generally received opinion that, "in asphyxia, the movements of the heart cease in a few minutes after the cessation of the functions of animal life." The second question is more readily answerable; but the author was not aware that any experiments bearing directly on it had been performed previous to his own.

The subjects of experiments were dogs, cats, and rabbits. They were drowned in water varying in temperature from 40° to 50° Fahr., and in one instance 36°. On being removed from the water, after every external symptom of life had disappeared, they were opened by the removal of the anterior part of the chest, so that the movements of the heart could be observed.

Some of the experiments were parallel; *i. e.*, two animals of the same age and size were chosen, and, after being drowned in the same way, were opened at the same time; the difference being that one animal was, previous to being opened, put into the hot bath at 100°, and the other was left exposed to the atmosphere. The number of animals experimented on as just mentioned was twenty-eight; of these, two being set aside which were submerged for an hour, in eighteen the heart was found beating when first observed; in eight its action had ceased.

The animals were opened at periods from the commencement of asphyxia varying from the fifth up to the thirteenth, and in one instance the twenty-first minute. The average period during which the ventricles continued to contract was nineteen minutes; the longest period was in a rabbit—forty-five minutes.

With regard to the first portion of the second question, the morbid appearances of the animals put into the hot bath were compared with those of the animals not so treated. In the animals put into the bath, the lungs were much more congested, more full of blood; they were firmer in substance and specifically heavier than those of the animals not so treated. Both sides of the heart were loaded with blood. In some instances the blood was coagulated in the vessels of the lungs, the systemic veins, and the cavities of the heart. The blood was generally less fluid than in the animals not put into the bath, and coagulated more rapidly when removed from the vessels. In no instance did the bath produce a respiratory effort or any movement whatever on the part of the animal; it seemed, further, to shorten the duration of the heart's action.

With regard to the second portion of the second question, experiments of the following character were performed.

Animals were drowned in water from 45° to 50° Fahr.; they were kept under water, some for one minute, some for one minute and a quarter, and one for two minutes. When removed from the water, they were placed on the table exposed to the air. They soon began to breathe feebly. In order to compare the effects of the hot bath with those where all treatment was omitted, some of the animals were left to themselves, others were put into the bath as soon as respiration had been re-excited.

Thirteen experiments were performed—twelve on rabbits, one on a cat. Of the thirteen, seven were put into the hot bath; of these, six died, at periods varying from two to twenty hours after submersion. Six animals were left to themselves; of these, four recovered, and two died, both between the eighth and twentieth hour after submersion.

The animals which had died after being put into the hot bath presented the following morbid appearances. The lungs were dark-coloured, full of blood, firm, almost liver-like in appearance. In some instances, portions sank in water; the air-tubes were empty; there was blood in all the cavities of the heart, in one instance coagulated. In the animals which died after submersion, but which were not put into the hot bath, the lungs were somewhat firm and congested, but to a less extent than in the others.

The experiments appear to the author to be sufficient to establish the principle of the injurious influence of the hot bath, both when asphyxia is complete and when recovery is commencing. In the former case, the bath momentarily increases the circulation; but respiration being in abeyance, the lungs become loaded with blood, and the left side of the heart distended. In the latter case, respiration being imperfect, engorgement of the lungs takes place, and subsequent arrest of the heart's action.

The following conclusions were drawn by the author from his experiments:—

1. In asphyxia by submersion, the ventricles of the heart do not, as a rule, cease to contract "in a few minutes after the cessation of the functions of animal life", but in many instances their action continues for a very considerable period; and this serves to explain how recovery has taken place after lengthened submersion.

2. In cases of asphyxia where respiration has altogether stopped, the effects of the hot bath are, to produce an accumulation of blood in the lungs and in the left side of the heart, together with a tendency to coagulate on the part of the blood; it does not tend to prolong the action of the heart, but rather to paralyse its movements and diminish the duration of its contractions; it does not excite respiratory efforts, and prevents artificial respiration being properly carried out.

3. In cases of asphyxia where respiration has been re-excited and is being feebly carried on, the hot bath, although in some instances it seems to have no immediate bad result, yet has a tendency to produce a fatal issue some hours after its use, by causing extreme congestion of the lungs, together with consolidation and collapse of the pulmonary tissue.

The following practical inferences were drawn from the above conclusions:—

1. Efforts to restore animation should be made in all cases where asphyxia has not been of very prolonged duration.

2. The prolonged use of the hot bath in asphyxia is not only inefficacious, but dangerous; and its temporary use appears to be attended by no direct benefit. So far as any means similar to that of the hot bath are likely to produce respiratory movements, the alternate dashing of hot and cold water on the body is probably the most efficacious.

3. It appears safer practice to omit all artificial treatment when respiration is going on feebly, than to make use of the hot bath.

4. In the treatment of asphyxia, all efforts should be primarily directed to restoring or continuing the respiratory movements; and all measures tending to load the lungs or embarrass the respiration should be avoided.

The author believed that the best method of performing artificial respiration we are yet acquainted with is that recommended by Dr. Marshall Hall.

Death from Scurvy: Inquest. Mr. Walthew, the deputy coroner for Middlesex, concluded an inquest on Friday week at St. George's-in-the-East, on the body of William Burden, one of the crew of the ship *Caranto*, that arrived at Gravesend on the 9th inst. from Ceylon. The ship had been short of water, bread, and other provisions. Many of the crew were very ill, and the deceased died on the night of his arrival. From the evidence of the captain it appeared that the ship was short of the provisions mentioned, though the voyage was less than an average one, and that there never is an inspector at a foreign port to see the ship before her voyage sufficiently and properly victualled. A sample of the lime-juice was found to be quite putrid, and Mr. Broadwater, the surgeon, who made a *post mortem* examination of the body, stated that it contained sulphuretted hydrogen, and would poison any one who drank it. The jury returned a verdict that the deceased died from dropsy caused by scurvy, there being a deficiency of lime-juice, and requested the deputy coroner to write to the Board of Trade, suggesting the use of citric acid as a substitute for lime-juice, the latter, from the medical evidence, being subject to decomposition.

Correspondence.

INTESTINAL OBSTRUCTION.

Letter from John Gay, Esq.

Sir,—Will you allow me a space in your columns for a few remarks?

In the Journal for May 11, Mr. Joseph Hinton does me the honour to refer to an abstract which appeared in the number for April 18th, of a paper on "Internal Obstruction by Bands," which I read at a recent meeting of the Medical Society of London, chiefly for the purpose of showing that my views on that subject were anticipated by him in a paper published in the number of the same Journal for May 20, 1853.

I am ashamed to confess that I had not read Mr. Hinton's paper until he drew my attention to it. I have since read it; and deem it a valuable addition to the literature as well as to our practical knowledge of the subject of which it treats; but I cannot discover in it that identity, either of theme or aim, with mine, on which alone a comparison can justly be instituted between the two.

Mr. Hinton's paper, whilst based upon a case of obstruction by a band, yet treats of obstruction from a variety of causes; whereas mine relates to that form of obstruction only that is produced by the "solitary" band. Mr. Hinton sets out with the dogma that "for practical purposes, internal strangulation, intussusception, and twist, or malposition of the intestines, resemble each other in symptoms, especially in the character of the attack." It was the object of my paper to shew—or, rather, the inference I drew from the facts upon which it was based was—that, in direct opposition to this view, strangulation or incarceration by a band has its own peculiar and diagnostic features; and may, therefore, in well marked cases, be distinguished from every other form of obstruction; even from intussusception and twist. I based my inferences upon an analysis of a large number of cases in which a band alone was concerned in the constriction; whereas Mr. Hinton based some of his—*e.g.*, the suddenness of the attack—upon a still larger number of cases; but these included as well ileus, stricture, enteritis, impaction, etc. My paper is, therefore, strictly a guide, as far as it goes, to the detection of an especial form of obstruction; whereas Mr. Hinton's is more general in its application, and, excepting as far as the question of sex is concerned, obviously relates, at least, to the three forms of obstruction mentioned in the quotation I have made from it.

I cannot, therefore, discover those points of comparison between the two, which afford any grounds of contention for whatever merit may belong to either, arising from their respective claims to novelty or priority of publication; but, at the same time, I am most happy to yield to Mr. Hinton on both, if he conceive that the distinctions I have endeavoured to draw are less real than I believe them to be.

The time allotted for the reading of a paper at the London Medical Society is so short (half an hour) that I could not do more than consider the one form of obstruction of which my paper treated; or I was prepared to show, as I hope yet to have an opportunity of showing, not only that obstruction by bands has, in well marked cases, its own peculiar and distinctive features; but that the same may be said of each of the other varieties of obstruction to which the intestines are subject. And, I think, the importance of these distinctions is sufficiently obvious; for it is only for one or two forms, at most, that relief can be reasonably hoped from surgical operation. At present, I do not know that the boldest surgeon would feel himself justified in exploring the interior of the abdomen except for the purpose of releasing the bowel from an incarcerating band. As the surgery of that region widens its limits, it is possible that intussusception and twist may become included within them; but, in order to do this, we want the encouragement that successful cases of the first-mentioned class may, we hope, yet supply us with; and we cannot, I think, obtain that encouragement until we shall have obtained a more exact acquaintance with the means of distinguishing them.

I trust I have dealt fairly with Mr. Hinton's paper. It is, I repeat, a valuable contribution to the literature of the subject of internal obstructions; and contains some excellent practical and suggestive remarks.

The object I had in throwing together the few remarks that constitute my paper, was to remove, if possible, a little of the obscurity which hung over this difficult subject: and I have no other desire than that the views it contains might confirm or be confirmed by—refute or be refuted by—whatever else has been written thereupon, according to the truth that is in it. Apologising for the length of my communication,

I am, etc., John Gay.

Finsbury Place South, May 1861.

DRESSING OF SCALP-WOUNDS.

Letter from William Legge, Esq.

Sir,—In our Journal of May 4th, under the heading Progress of Medical Science, is a paragraph describing a mode of dressing scalp-wounds now being introduced in America, consisting of the union of strands of hair across the incision.

I am induced to trouble you with this communication, because, 'cute as brother Jonathan may be, it is not fair that to him should be attributed the introduction of a simple and successful practice which so favourably contrasts with the old plan of shaving, stitching, and plaistering the scalp. For six years past, I have never employed any other than this *new* method of dressing such wounds, however extensive; and it has fallen to my lot to treat many scores; for, when I was house-surgeon to the Westminster Hospital, "A *quart-pot* accident, sir" (the old night-porter's synonym for a broken head) was the most usual summons by which I was aroused at night.

The first case where I adopted the plan was that of one of the frail sisterhood, whose scalp had been laid open nearly six inches in extent by her affectionate protector,

"Cui flavam religat comam";

and who begged me piteously to spare her tresses. I divided the hair on each side of the wound; and, taking opposite tufts, braided them firmly together, so as to bring the edges of the wound into apposition. A compress of wet lint, and a turn or two of a bandage, completed the operation; and the result was so satisfactory that I have never adopted any other proceeding since.

My last case occurred three months since. A boy had been knocked down and run over by a horse and cart. He was taken up insensible, and found to have sustained a scalp-wound three inches in extent. I employed the same treatment of braiding opposite tufts of hair, etc.; and on the fourth day union was complete.

I have never found it necessary to shave any part of the head; nor do I see the advantage of the perforated shot mentioned in the American journal; as, if properly brought together, the plaited strands of hair will be quite sufficient to maintain such close apposition as mostly to ensure union by the first intention.

I am, etc., Wm. Legge.

Wiveliscombe, May 6, 1861.

Medical News.

Royal College of Surgeons of England. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 21st:—

Gardner, Charles, Toronto, Canada West
Smith, John, Gillingham, Kent
Thomas, William Lanham, Horsham, Sussex

Licentiates in Midwifery admitted at a meeting of the Board, on May 22nd:—

Garnham, Devereux John, Lowestoft; diploma of membership dated April 16, 1861
Johnson, Cuthbert N. H., Winchester; January 30, 1861
Kidd, Henry Alexander, Calcutta; April 30, 1861
Ninnis, Belgrave, Surrey Square; April 18, 1861
Phillips, George B., Clapham; April 19, 1861
Smart, John Naish. Southville, Bedminster; April 11, 1861
Smith, George, Birmingham; August 15. 1849
Whitmarsh, William M., Chippenham, Wilts; April 11, 1861

Apothecaries' Hall. On May 2nd, 9th, and 16th, the following licentiates were admitted:—

Calvert, G., Army
Cook, John, Buckinghamshire
Furse, E., South Molton
Galliers, T. J., Lady Grove
Goldsmith, G. P., Bedford
Hale, E. T., Beaufort
Harris, B., Park Street, Grosvenor Square
Harrison, George, jun.
Jackson, T., Leeds
Houlden, E. R., Crondall
Kilburn, J. E., West Auckland
Maling, E. A., Bishopwearmouth, Sunderland
Robinson, E., Birmingham
Wilkinson, C., Kentish Town

APPOINTMENTS.

Hargrave, William, M.B., elected Representative of the Royal College of Surgeons of Ireland in the Medical Council, in the room of the late Dr. W. H. Porter.

Portsmouth, Portsea, and Gosport Hospital. The following appointments of medical officers to this institution have been made:—

For In-patients. ..	Parson, E. K., Esq. Norman, H. Burford, Esq. Miller, J. W. M., M.D. Knight, K. E., Esq.
For Out-patients.	Page, F., M.D. Cousins, J. W., M.D. Simpson, T. P., M.D. Taylor, J., M.D.
For Gosport.	Rundle, W. J., M.D. Wharton, H. S., Esq.

Royal Navy. The following appointments have been made:—

M'Carthy, Edward, Esq., Assistant-Surgeon, to the *Steady*.
Mansfield, P., M.D., Assistant-Surgeon, to the *Wellesley*.
Mills, Edward F., Esq., Assistant-Surgeon, to the *Donegal*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Ashdown, G., Esq., to be Assistant-Surgeon 5th Company Northamptonshire R.V.
Brock, W. K., Esq., to be Assist.-Surgeon 1st Gloucestershire A.V.
Lansdown, F. P., Esq., to be Surgeon 1st Gloucestershire A.V.
Raper, W. A., M.D., to be Surgeon 2nd Administrative Battalion Hants R.V.
Robertson, C., M.D., to be Assistant-Surgeon East and North York Artillery Militia.
Stedman, W., Esq., to be Assistant-Surgeon 2nd Administrative Battalion Hants R.V.
Temperley, G., Esq., to be Assist.-Surg. 1st Cumberland R.V.

To be Honorary Assistant-Surgeons:—

Browne, H., Esq., 14th Corps Kent A.V.
Denne, J., Esq., 7th Buckinghamshire R.V.
Goode, H., M.B., 1st Derbyshire R.V.
Johnson, D., Esq., 4th Administrative Battalion, 30th Company, Staffordshire R.V.
Smith, S. W., Esq., 10th Company Worcestershire R.V.
Stone, E., Esq., 36th West Riding of York R.V.

MARRIAGE.

*Lankester, Henry, Esq., Leicester, to Rachel Crosby, second daughter of John Crosby Squire, Esq., of Royston, Herts, on May 16th.

DEATHS.

Brown, Mark, M.D., at Ryde, aged 55, on May 17.

Clarke. On May 15th, at Wantage, aged 5, James H., eldest son of Thomas F. Clarke, M.D.

Davey, Robert, Esq., Surgeon, at Shere, near Guildford, on May 14.

Mason, Chas. E., Esq., Surgeon, at Maldon, Australia, on March 2.

Pearce. On May 19th, at Brighton, Jane, wife of Ravenhill Pearce, M.D.

Popham. On May 19, at Caledonia Place, aged 6 months, Emily Jane, daughter of R. H. Popham, Esq., Surgeon.

Sephton. On May 14, at Culcheth, near Warrington, aged 7 months, John W. B., infant son of *Richard Sephton, L.R.C.P.Edin.

Steggall, Edward C., M.D., second son of John Steggall, M.D., of Southampton Street, at Constantinople, on April 26.

Stephen, Jas., M.D., at The Grove, near Elgin, aged 30, on May 13.

Junior Medical Society of London. The first ordinary meeting of the Junior Medical Society is to be held on Thursday, May 30th, at Charing-cross Hospital (the first on the Alphabetical list of Hospitals).

New Hospital at St. Petersburg. The municipal authorities of St. Petersburg have determined to found a hospital for poor artisans, in commemoration of the emancipation of the serfs. It is to be called the Alexander Hospital, and the project has been favourably received by the Emperor.

Queen's University in Ireland. At the triennial visitation of the Queen's College in Galway, on May 17, the Lord Chancellor of Ireland stated that the number of students in the Belfast College was then 239; in Cork, 171; in Galway, 141; non-matriculated students, 106; making a total of 657 students in the three colleges.

A Hero-Surgeon. The New York Medical Association for the supply of lint, bandages, and other surgical and hospital stores to the army, was called into existence at the suggestion of Dr. Crawford, the hero-surgeon of Fort Sumter; and, having become efficiently organised and brought into proper relations with the Army Medical Bureau, its utility promises to be of vast importance.

Destruction of a Hydropathic Establishment by Fire. On Wednesday week, a considerable portion of the hydropathic establishment kept by Dr. Barter at Blarney was destroyed by fire, supposed to have been caused by heating of a flue. The "water-cure" was successfully applied, but not till damage to the extent of over £400 had been done. We understand that Dr. Barter was not insured.

Organic Diseases and Organ Grinders. Michele Castillo was charged, a few days ago at a police court, with being a public nuisance. Dr. Arthur Helsham said he is a physician in the Mile-end-road, and has a rather extensive practice in heart diseases, the delicate phases of which are chiefly determinable by the application of the stethoscope, and the absence of all disturbing noises was absolutely imperative both to the physician and the patient, or a totally false diagnosis might be arrived at. Organ-players were a constant trouble to him; they came opposite his house at all hours, and persistently played there, in spite of all entreaties and threats.

The late Sir W. Burnett. The will of Sir William Burnett, K.C.B., dated Dec. 7, 1859, was proved in the London Court on the 10th inst. by his son, the Rev. William Burnett, M.A., rector of Tangmere, Sussex, one of the executors, a power being reserved to the testator's daughter, Mrs. Notts, widow, the other executor. Sir William Burnett has left all his property, both real and personal, to the members of his family. To his son, the Rev. W. Burnett, he bequeaths his plate, books, pictures, and other effects; and, after leaving legacies and annuities amongst his three daughters and a granddaughter, Sir William gives the remainder of his estate to his son, appointing him also residuary legatee. The will is brief, and is attested by Edward Leech, surgeon, and Thomas Barson, both of Chichester. (*Illustrated London News.*)

Pharmaceutical Society. The annual meeting of this society was held on the 15th inst. at the institution in Bloomsbury-square. Mr. Morson, the president, occupied the chair. He designated the complex prescriptions at present in vogue as a great evil, to the existence of which the homœopathists owed much of their success. The secretary then read the report which recommended that the sum of £2,000, bequeathed by the late Mr. Jacob Bell for increasing the efficiency of the School of Pharmacy, should be applied to the building of a new laboratory, the construction of a new lecture hall, the extension of the museum and library, and the provision of suitable accommodation for conducting the examinations under the Pharmacy Act. The contributions to the Jacob Bell Memorial Fund had reached to nearly £2,000.

The late Professor Henslow. The Rev. John Stevens Henslow, Professor of Botany in the University of Cambridge, died on the 16th inst., at his rectory, Hitcham, Suffolk. The late professor was born at Rochester, in 1796. On the death of Dr. Edward Daniel Clarke in 1822, Mr. Henslow was elected his successor in the professorship of mineralogy. In 1825 he succeeded the Rev. Thomas Martin in the professorship of botany, which he continued to hold to the time of his death. His principal works are, *A Geological Description of Anglesea, The Principles of Descriptive and Physiological Botany, Le Bouquet des Souvenirs, Report on the Diseases of Wheat, Account of Roman Antiquities found at Rougham, Dictionary of Botanical Terms, Flora of Suffolk* (conjointly with E. Skepper); besides numerous papers in scientific periodicals.

Asylum for Idiots at Earlswood. The annual report of the committee of the Asylum states that the past year has been one of decided progress. The inmates of the institution, including the attendants, amoun to upwards of 400. Bequests, amounting to nearly £4,000, are specially enumerated. The report of the medical superintendent, Dr. Down, shows that 71 patients have been admitted since the last annual meeting. Dr. Down bears testimony, after a visit of inspection to similar asylums in France, to the superiority of the institution at Earlswood, among the agencies for ameliorating the condition of one of the most pitiable classes of the human family. Industrial occupations, as a feature of the asylum, have been largely extended. The general health of the patients is stated to have been remarkably good. The various features of management comprehended in the asylum are separately adverted to in the report of the medical officer, and the retention of the farm is recommended as a valuable sanitary adjunct to the institution.

University of Cambridge. The Council of the Senate having taken into consideration the opinion of the Board of Medical Studies, as expressed in their report dated March 7th, 1861, have recommended to the Senate:—1. That a doctor of medicine be annually appointed as assessor to the Regius Professor of Physic when presiding in the School at Acts for the degree of doctor of medicine, and with him determine upon the merits of the exercises and their sufficiency for qualifying the candidate for proceeding to that degree. 2. That the said assessor be nominated by the Board of Medical Studies and appointed by grace of the Senate at the second Congregation in the Michaelmas term. 3. That he receive five guineas for each act from the University chest. The council beg leave also to inform the Senate that a register for students commencing their studies in medicine will be opened on October 1st, 1861, by the Regius Professor of Physic, and will be kept by him in accordance with the resolutions of the General Council of Medical Education and Registration.

University of Edinburgh. At the half-yearly meeting of the general committee of this university, held on April 16th, the following deliverance of the University Court was read on the subject of parliamentary representation:—"The Court having taken into consideration the representation by the General Council of the University in regard to the Scottish Universities being represented in Parliament, is of opinion that the question is surrounded with so many difficulties, and gives rise to so much difference of opinion, that it is inexpedient for the Court to take any action in the matter in the manner suggested by the General Council." A lengthened discussion ensued; and the following motion, proposed by Mr. Boyle, and seconded by Professor Bennett, was finally carried by a large majority, notwithstanding the opinion of the Solicitor-General, in accordance with the views formerly expressed by Mr. Gladstone, that the University Council, as well as the University Court, had no power to petition Parliament in a corporate capacity:—"That the General Council resolve to petition Parliament in favour of the proposal to give one of the vacant seats to the Scottish Universities, and request the Principal to prepare such a petition, and authorize him to sign it in name of the Council, and transmit it for presentation to the Rector of the University."

Birmingham and Midland Counties Medical Registration Association. The second annual meeting of this association was held at Birmingham on the 16th inst.; Dr. Anthony, the retiring President, in the chair. The report, which was unanimously adopted, stated that owing to the very loose construction of the Medical Act, the committee (though hitherto successful in all their cases) had been compelled to exercise very great caution in regard to prosecutions, but that they were determined to carry any case into court if the evidence supplied was clear and sufficient. The number of members was reported as 140. The Treasurer reported a balance in hand of £3 8s. The following officers were elected for the ensuing year:—*President:* John Postgate, F.R.C.S. *Vice Presidents:* E. Chesshire, F.R.C.S., Birmingham; C. Townsend, Birmingham; C. Male, West Bromwich; G. H. Whymper, Walsall. *Treasurer:* George Yates, 24, Paradise Street, Birmingham. *Honorary Secretary:* J. Garner, Birmingham. *Solicitor:* A. Walter, Esq. 37, Waterloo Street, Birmingham. *Committee:* A. Allcock, Smethwick; J. Anthony, M.D., Birmingham; R. L. Baker, Birmingham; T. Boisragon, M.D., Birmingham; C. Bracey, Birmingham; J. Brown, Oldbury; J. Carter, Birmingham; P. H. Chavasse, Birmingham; E. F. Dehane, Wolverhampton; Bell Fletcher, M.D., Birmingham; T. P. Heslop, M.D., Birmingham; W. E. Johnson, Dudley; W. R. Jordan, Birmingham; H. Knight, M.D., Stafford; W. W. Schofield, Highgate; C. S. Meeke, Birmingham; D. H. Monckton, M.D., Rugely; O. Pemberton, Birmingham; T. Thomson, M.D., Leamington; W. L. Underhill, Tipton; J. Warnock, Birmingham; H. Wilson, Stourbridge; J. F. Woody, Tamworth. Votes of thanks having been passed to the retiring officers, the proceedings terminated.

Royal Medical Benevolent College. On Friday the anniversary festival of this institution was held at Willis's Room; and upon this occasion about 200 gentleman had the pleasure of being introduced to the new president, Lord Chelmsford. The portion of the building destined for the school was in May last so far completed as to accommodate 150 boys; but only five pensioners' houses, containing twenty residences, had been then built. There are resident in the college twenty pensioners, being aged medical men or their widows, each of whom is provided with three comfortably furnished rooms, an allowance of coals, and a pension of £15 a-year; also 150 boys, sons of medical men, forty of whom being the foundation scholars, are educated and maintained at the expense of the institution. So far the boys educated in the school have acquitted themselves with credit in all the public examinations and competitions to which they have been subjected. The College is possessed of funded property to the aggregate amount of about £4,450. A recent arrangement admitting ladies as life governors on payment of £5 5s. has resulted in the receipt of £2,300, Her Majesty graciously heading the list with a donation of £100. The annual subscriptions last year amounted to £3,150 odd, the donations to £1428, and certain bequests to £540. The Chairman, in the course of the evening, related the history and circumstances of the institution, and earnestly commended it to the public support. The subscriptions in aid of its funds, after the dinner, amounted to about £1000. At the last election there were eleven unsuccessful candidates for pensionerships, and thirty-one unsuccessful competitors for foundation scholarships.—The Council of the College have received a letter from Sir James Clark, to the effect that out of the proceeds of a subscription for a testimonial to Dr. Hodgkin, an educational prize to the school has, under certain conditions, been established by a deed; the trustees being Sir Jas. Clark, Dr. Sibson, and Dr. Hodgkin. The subscriptions amounted to £281 : 12 : 6; out of which sum a commemorative piece of plate was presented to Mrs. Hodgkin; and, after deducting the expenses, the remainder, £204 : 10, was invested in Madras Irrigation shares. The interest of this fund is guaranteed by the Indian government; and, at present, produces £10 a year, which will be increased if the company's dividends exceed five per cent. That the prize may be better worth striving for, it will only be given every alternate year; and the first competition will take place during this summer.—The annual meeting of the governors of the institution was held on Wednesday at Soho Square; Lord Chelmsford, the president, in the chair. The Secretary read the report, which, after adverting in terms of deep regret to the loss which the institution had sustained by the lamented death of the late Earl Manvers, stated that Lord Chelmsford had been elected as president at an extraordinary general meeting held on the 4th of March last. At the same meeting, a resolution was passed to add to the sixteenth by-law a clause to the effect that when a husband and wife had been admitted to the asylum together, and the husband died, then the wife, if fitted by age or otherwise to receive a pension, should not, in losing her husband, be also compelled to leave the college. The election of foundation scholars would take place at the Freemasons' Tavern, on the 28th instant, when there would be five regular vacancies to fill. A resolution would be proposed to the meeting, authorising the admission of a sixth boy, in the place of one of the scholars who had been disabled from attending school by illness, and of whose return there was no hope. Should this resolution pass it would not affect the votes at the election, which must still be held for five candidates only, and according to the balloting-papers. After the election of the other candidates, the boy who remained with the largest number of votes would be admitted as a sixth foundation scholar, with the same privileges as the rest. There were, this year, no vacancies among pensioners. The progress of the school had continued to be highly satisfactory. There were in attendance at Christmas thirty-eight foundation scholars and twenty day scholars. Eleven of the college boys went up for preliminary examination at Apothecaries' Hall in July last, and, with one exception, passed triumphantly. The committee recommended an alteration of the twenty-fifth by-law relating to the expulsion of pupils, giving power to the council to order expulsion, but giving the parents the liberty of appeal to the council. The report was adopted, and resolutions in accordance with the recommendations contained therein agreed to.

UNIVERSITY OF ST. ANDREW'S: MEDICAL EXAMINATION PAPERS, MAY 1861.

First Examination. First Part. *To be translated into English* (a passage from Celsus De Re Medicâ). Give the derivations or primary meanings of the following words: Amenorrhœa, Artery, Colon, Epiglottis, Pachydermata, Symptom, Teratology, and Trachea. *Second Part. Chemistry.* 1. State concisely what you understand by a Radical, an Alkali, a Base, an Acid, and a Salt. 2. What is the ultimate composition of Spirit of Salt, of Prussian Blue, of Mulberry Calculus, and of Writing Ink? 3. How is Corrosive Sublimate made? And what are its tests? *Third Part. Materia Medica and Therapeutics.* 1. Describe the mode of preparing Iodide of Potassium, and state what you know regarding its mode of operation and uses. In what cases is Bromide of Potassium employed with advantage? 2. Describe the mode of operation and uses of Acetate of Lead, and write a Latin Prescription (without using symbols or abbreviations) for a mixture or pills containing it, with directions for use; the case being supposed to be one of pulmonary hæmorrhage. 3. How is the tincture of the Sesquichloride of Iron prepared? State your reasons for or against prescribing it in conjunction with an alkali or alkaline carbonate. What are its chief therapeutic uses? 4. What plants of the order Convolvulaceæ are used in Medicine? What parts of these plants are employed, and what is their mode of action on the economy? Describe the composition of the Pharmacopœial powders in which they occur.

Second Examination. *Anatomy and Physiology.* 1. Describe the Pelvis, especially noticing its boundaries, position, axes, and the differences between the male and female Pelvis. 2. Give the course and relations of the Internal Maxillary Artery. 3. Describe the general anatomical relations and minute structure of the Kidney. 4. State what you know regarding the following points in connection with Respiration: (*a*) The changes in the exspired air. (*b*) The amount of inhaled oxygen as compared with the amount exhaled. (*c*) The influence of various circumstances in modifying the elimination of carbonic acid. (*d*) The quantity of carbon excreted daily by the body. (*e*) The space in cubic feet that should be allotted to every patient in the wards of a Hospital. 5. Describe the mode of formation, structure, and uses of the Placenta.

Third Examination. (N.B. In answering the practical questions, the examiners require every Candidate to specify the mode of treatment, which he is in the habit of adopting, and the doses of the medicines which he prescribes.) *Practice of Medicine.* 1. Describe the Oxalic Acid Diathesis with especial reference to (*a*) the properties of the Urine, (*b*) the constitutional symptoms, (*c*) the usual causes, (*d*) another diathesis into which it is liable to pass, (*e*) its treatment by medicine, (*f*) its dietetic management. 2. Name the pustular Diseases of the Skin, and state how they are distinguished from one another. 3. Mention, as far as you remember, the various remedies that have been from time to time employed for the treatment of Tænia Solium; select any three from among these in which you have confidence, and state the method in which they are to be exhibited, and the doses in which they are usually given. 4. What morbid states of the stomach, or of the system generally, increase and what diminish the appetite? 5. A youth, aged 18, has twice during the last two years complained of severe headache lasting for two or three days and accompanied with deafness. About the beginning of December 1860 the pain returns, severe and frontal with giddiness, vertigo, and tinnitus aurium. He is seen on the 10th of December. Face red, expression of exhaustion, no fever, motion and cutaneous sensibility perfect. Symptoms yield after leeching and purging, but in two days (Dec. 12) numbness commences in left arm followed next day by paralysis of left arm, and in two days more by complete hemiplegia, blindness of left eye, and paralysis of levator oculi on left side. Occasional leeching and purging employed, but with no improvement till January 3rd, when slight movements commence in the paralysed limbs. On the 8th, paralysis entirely gone, and on the 12th seems well. On the night of the 12th seized with raving followed by coma and stupor, on the 16th the pulse becomes quick and small, severe diarrhœa supervenes, the tongue is red and dry. In four days (Jan. 20) the head symptoms disappear, during the next few weeks diarrhœa persists in spite of treatment, bed-sores form, emaciation increases, and the patient dies exhausted on the 11th of February. What has been the probable state of the brain at the successive stages of this illness? What appearances in the brain will you expect to find on *post mortem* examination? What will be the probable state of the other viscera?

Fourth Examination. *First Part. Surgery.* 1. What is Pyæmia, its causes, symptoms and termination? 2. Describe the various forms of Ulcer, and the principles of treatment in each variety. 3. Describe the diseases which may occur in the Antrum Maxillare. 4. Two months ago a man received a blow on the testicle; it became swollen and painful, but the pain subsided and has now nearly disappeared except on considerable pressure. The swelling is now of the size and shape of a lemon, and is smooth and hard to the touch. What is the disease? explain its nature and the differences between it and other swellings which may occur in the same situation; and how would you treat the case described? *Second Part. Midwifery.* 1. What signs of pregnancy are present six weeks after impregnation? 2. Describe briefly a characteristic rickety pelvis, a malacosteon pelvis, and an oblique-ovate pelvis. 3. Describe the mechanism of delivery of the head in the case of a footling which has descended with the back of the child looking anteriorly. 4. After delivery a woman is found to be flooding and to have the uterus inverted. What is her condition, and what treatment is to be pursued? 5. Describe briefly the ephemeral fever of lying-in women and its treatment.

Varieties.

Illegitimacy in America. In the published transactions of the Statistical Congress, London, Dr. Jarvis, of Massachusetts, said, "Illegitimacy is a very rare thing with us. This assertion is wide of the truth; at least, in our cities. The Lying-in Institutions of New York city have constant applications from unmarried women. Dr. Sanger, in his investigations of the condition of the prostitutes of this city, says: "The whole of the children borne by single women are, of course, illegitimate. Of the children of married women, over forty per cent.; and of the children of widows, forty-four per cent., are illegitimate. Taking the total number of children of the three classes, and calculating upon this broad basis, it will appear that 1090 illegitimate children were born, getting an average of fifty-seven per cent.; or, to speak in plain terms, of every hundred children borne by women who are now prostitutes, forty-three were born before the mothers (married women or widows) embraced this course of life." (*American Med. Times.*)

Bigotry. Sir Robert Peel told the following anecdote some time ago, *apropos* of Spanish bigotry:—"In 1831, when the cholera was raging in the north of Spain, the assistant-surgeon of the ship under the command of Lord J. Hay died, a victim to his courage, in Santander, in attending the poor Spaniards; but having sacrificed his life the Spanish authorities refused him Christian interment, except below high water mark."

How to Treat Pseudo-Medical Systems. When Hannibal was engaged in his siege of Rome, the citizens, to show their sense of security against his assaults, and their contempt of his vain efforts, bought and sold the ground upon which his army was encamped, at or even above its previous rates in the market. So it is now with regard to the little grounds of truth upon which the many false systems of medical doctrine, which attempt the hopeless task of overturning legitimate medicine, are encamped. We shall not abandon those truths, but hold them in equally as high estimation as though they had never been defiled or dishonoured by the footstep or grasp of any short-lived delusion, or evanescent cheat, clad in the attire of medicine. (*Chicago Med. Journal.*)

The Yankee Nostrum Trade. A correspondent of the *Boston Medical Journal* says that there has been within the past few years an immense increase in the sale of patent medicines, and that forty per cent. of the items, which make up the orders sent for drugs, are for such articles. The price current list shows that the number of quack medicines in demand is between five and six hundred. It is not uncommon for those who deal in them largely and exclusively, to make purchase of a single article at one time to the amount of ten thousand dollars. Notwithstanding the great success of some adventurers, the business is is an extremely hazardous and precarious one. The cost of winning public attention and creating a demand is very great, and usually exceeds the profits. Where one like Ayer, Brandreth, or Townsend succeeds, hundreds are driven into bankruptcy.

Singular Phenomenon. In boring for coal midway between Wakefield and Pontefract, at a depth of one hundred and forty yards, a strong smell of sulphur was perceived, impregnating the water that bubbled up in the boring hole. The water soon reached the surface, and has been boiling, or rather (for it is only warm) bubbling furiously; and on applying a lighted paper the sulphur blazes up through the water to the height of three or four feet, presenting the appearance of "snap-dragon" on a large scale, the boring hole being about five feet square. It is estimated that a depth of one hundred yards will still have to be bored before the coal is reached, but how long it may be before operations can be resumed remains to be seen. Hundreds of people have visited and are continually visiting the spot, the phenomenon, unprecedented as it would seem, being an object of general interest in the neighbourhood.

Sale of Poisons. The following is the act passed by the Legislature of the State of Pennsylvania in regard to the sale of poisons:—"No apothecary, druggist, or other person, shall sell or dispose of by retail, morphia, strychnine, arsenic, prussic acid, or corrosive sublimate, except upon the prescription of a physician, or on the personal application of some respectable inhabitant of full age, of the town or place in which such sale shall be made. In all cases of such sale the word "poison" shall be carefully and legibly marked or placed upon the label, package, bottle, or other vessel, or thing in which such poison is contained; and when sold or disposed of otherwise than under the prescription of a physician, the apothecary, druggist, or other person selling or disposing of the same, shall note in a register kept for that purpose, the name and residence of the person to whom such sale was made, the quantity sold, and the date of such sale. Any person offending herein shall be guilty of a misdemeanour, and, on conviction, be sentenced to pay a fine not exceeding *fifty dollars*."

Modified Lunatic Refuges. Mr. Gaskill reminds us "that diseases of the mind, as well as diseases of the body, assume an infinite variety of forms, varying both in kind and intensity." He thinks it unwise that "the same certificates, orders, returns, restrictive regulations, and penalties are applicable to all patients, whether affected merely by the slightest aberration, or suffering from total loss of mental power and self-control. How marked a difference," he says, "is here observable in respect to bodily complaints, for which we have hospitals both general and special, dispensaries for milder cases, as well as convalescent and sea-side houses. And why, it may with good reason be asked, have we not asylums adapted to the slightest as well as the most severe forms of disease?" The particular suggestion made by Mr. Gaskell is for the legal sanctioning of a sort of asylum, in which, under wise medical supervision and with quiet oversight, care might be had of slight affections, or the slight beginnings of disease, that neglect only, or mismanagement, would cause to be severe. This should be a recognised asylum, lying outside the operation of the present lunacy laws, and use might be made of it as a sort of probationary house for insane patients, discharged as cured from asylums of the present sort. In such a house assurance might be had that the discharged patients are reasonably safe against those relapses which are now perpetually bringing them to the bar of our courts for wild, distressing crimes. There are a thousand suicides among us every year, of which the greater number come of an uncontrollable diseased impulse.

Green Paper. The effect of the Spring is felt as much in the interior of our household as in the gardens and fields. The verdure of the lawn by contrast makes our household embellishments look dingy and unrefreshing; and to keep company with external nature, we call in the painter and paperhanger to brighten up our rooms for the season. The same beneficent influence which makes the dove's neck become irridescent with bright hues as the sun enters the vernal equinox makes your young wife, good reader, look out for some cheerful paper for her drawing-room; or yourself, possibly a bachelor, to rejuvenate your study in the same manner. We can have no possible objection to your doing so: but we wish to speak one word of warning. The most seductive of all colours, and the one best calculated to attract a jaded eye, is green—bright and vivid green, such as we see flushing the meadow grass at this season of the year. Beware of that paper! It is very singular that we associate moral qualities with certain colours, and with vivid green we associate deception and malignity. Where the morass is the least trustworthy, there its verdure is brightest. Green eyes represent jealousy, and the fabled dragon of old was always pictured green; but, permit us to add, that not one of these greens was half so deadly as the roll of apple-green paper which the decorator unfolds before your eager eyes. Put it upon your walls and you are lining your rooms with pure death; promise yourself that your study so enlivened will be the most cheerful room in the house, and be sure that you will soon become the most miserable man in it. The doctor will treat you for some hidden malady, and the six-ounce phials will accumulate by scores; but you will be no better; your strength will fail, your head will ache, your nose will run, and your eyes will water, your throat will be sore, and all the doctors' stuff in the world will be of no avail. Go away, and your vigour returns; set once again to work, and within the green embraces of your snuggery, and again you will be bewitched. (From "Death on our Walls," in the *London Review.*)

An Ancient Roman's Cuisine. The tender parts of peacocks, wild boar, oysters, blackbirds, deer, hares, spices from all countries, and ingenious forms of pastry—these were dressed up in a thousand different ways, so that Apicus could leave ten books of receipts. The Romans had three daily meals, the *jentaculum*, or breakfast; the *prandium*, or dinner; and the *cœna*, or supper. The first consisted of bread and salt, olives, cheese, dried grapes, and sometimes milk and eggs. The *prandium* was more like our meat luncheon. It consisted of warm or cold meat, the remains of yesterday's supper; and, in luxurious houses, of oysters, eggs, and sweets. The drinks were water, wine, and mulsum—a beverage composed of wine and honey. The *cœna* was an elaborate affair, divided into three courses: The first, *gustus* or *promulsis*, was something like the "whet" of a modern French dinner, only of a more substantial kind: oysters, eggs, broth, light vegetables, especially lettuces, with piquant sauces, and digestible fish. Only mulsum was drunk with this course. With the second course, or *ferculum*, the serious business began. A huge roast—say a wild boar served up whole—was placed on the table; then came hares, pigeons, peacocks, flamingos, ostrich eggs, rare fishes, parrot heads, and nightingale tongues. The wine was cooled by the snow. Besides wine, there were various other drinks—beer, *camum*, and *zythum*—whatever they may have been. Then followed the third course, *mensæ secundæ*, consisting of fruit, sweetmeats, delicate dishes of many kinds. Fingers, of course, were liberally soiled in eating of these dishes, and instead of wiping them on bread-crumb, as the Greeks did, the Romans used napkins, each guest bringing his own. The women ate with the men; but they sat, while the men, in later years, reclined on sofas. Slaves carved the joints, keeping strict time to the accompaniment of music. (*All the Year Round.*)

Cure for Serpents' Bites. M. Cloquet has communicated to the Academy of Sciences the following letter from M. de la Gironnière, a physician of Manilla:—"In our virgin forests of Calanang," says M. de la Gironnière, "a vast variety of serpents are found, some of which are extremely venomous. A short time ago one of my labourers had his finger bitten by one which is considered by the Indians to be of the most dangerous kind. It is a small snake about 20 *centimètres* in length, of a yellow colour, with a flat triangular head. Its fangs are 1½ *centimètre* (half an inch) in length. The man was brought to me a few minutes after the accident. I had no volatile alkali at hand, so I cauterised the wound with burning coals; but this did not stop the alarming symptoms, which appeared with great rapidity. The tumefaction had already extended from the hand to the elbow. The patient uttered piercing cries in consequence of the pain he felt under the pectoral muscles; I was at a loss what to do. At length I was struck with the idea of making him drink a bottle of coco wine (alcohol of 16 degrees strength). The intoxicating effects were instantaneous; the patient began to rave, but without seeming to feel any pain; and the swelling of the arm made no progress. Half an hour after he had returned to his senses the pectoral pains recommenced: I administered a second bottle, and then a third, which completed the cure; the arm returned to its natural state, and the hand bore no traces of the injury but those of the cauterisation. I had often heard it said that alcohol, taken in a sufficient quantity to cause excessive intoxication, was a specific against the sting of serpents; I now have a proof of it, but I do not know whether it would do in other cases, such as the following one. An Indian was bit by a very venomous serpent, of a gray colour, with a round head, and sometimes six feet in length. It is the enemy of all other serpents, which it hunts down, whether they be venomous or not; it has happened to me four times to kill one while swallowing another serpent. This Indian returned home, cauterised the wound himself, and a few minutes later fell dead without complaining or evincing any suffering. His relations, who could not believe in so sudden a death, brought him to me; his limbs were still supple, but cold; the wound bore traces of the cauterisation, but no sign of tumefaction."

A Yankee Doctor on the Military Hospital of Madrid. The Military Hospital is larger than either of the others, although the average number of patients is lower than in the General Hospital. At the time of my visit, I was informed that there were only 500 patients, although it usually contained 800; but there are 2,000 beds and everything is on a vast scale. The ceilings are high and the passages wide; but everything is of rough stone, which now, in winter, gives it a chilly, uncomfortable appearance, although, I suppose, in summer it is pleasant enough. It is built around several courtyards, as you may well suppose, from the immense number of patients who can be accommodated. All the nurses here are men; there are no Sisters of Charity, as in the other hospitals, to attend on the sick. I was surprised, in one of the rooms into which I was shown, to see an invention of such a nature that I could hardly believe for the moment that I was not in my native country. It was a labour-saving machine, intended to cut and roll bandages. The end of a sheet is passed in on one side, and by merely turning a handle it is caused to pass under knives, which can be placed at any requisite distance from each other, and then rolled up exactly, as is done usually in the machines which I have often seen at home for a single roller. I was informed that by this machine, in one minute, twenty-five *metres* could be cut and rolled up into bandages ready for use. A *metre* is a little more than a yard. But I have not yet done with Madrid inventions. In another room I was shown models invented by an enthusiastic young physician, in which the muscles, arteries, etc., were beautifully and naturally depicted, the material being porcelain, and the colours burned in. One model of the muscles, etc., of the neck, especially attracted my attention as being of remarkable beauty. I was shown into the microscope room. On the table I saw lying about more than one French work on the microscope, and also a translation into Spanish of Kölliker. There was no original Spanish work: indeed, in all the opportunities which I have had of looking at collections of medical books, they have been almost all French: the Spanish medical literature is in its infancy, and the advance that is being made is by those who have studied at Paris, or any rate derive their inspiration from that quarter. The apparatus for conveying in military expeditions was interesting to me, particularly one intended for carrying five or six persons on the back of a camel. On each side were two chairs, with their backs to the sides of the camel, on each of which a man could be strapped, and sit with his feet hanging down. On the back was an ingenious arrangement which would do either for one very sick person, or for two who were able to sit up, it being readily changeable either into a bed with a shade for the head, or into two chairs back to back. There were also other arrangements for carrying two on a horse or mule in easy chairs. The doors of entrance into the different wards were all painted to imitate the entrance into a tent; and one of the wards, which was intended for officers, had each bed heavily curtained, and the curtains closely drawn, so as to convey by their arrangement the idea of a number of tents, as well as, of course, to give them more privacy than to the other patients. I looked into the kitchen in the cellar. It was, of course, very large, but everything seemed very rough and primitive. They were just cooking the dinner for the patients, and for a wonder, the messes looked very good, and did not smell of garlic. There were immense bowls full of a sort of mixture of soup and various kinds of meat, which they call "*puchara*," and which really appeared very savory. —*Med. and Surg. Rep.*

OPERATION DAYS AT THE HOSPITALS.

MONDAY	Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.
TUESDAY	Guy's, 1½ P.M.—Westminster, 2 P.M.
WEDNESDAY	St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.
FRIDAY	Westminster Ophthalmic, 1·30 P.M.
SATURDAY	St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal Geological (Anniversary).

TUESDAY. Royal Medical and Chirurgical, 8.30 P.M.: Dr. Dickinson, "On Diseases of the Kidney, accompanied by Albuminuria"; Mr. E. Sercombe, "On Uterine Derangement, apparently depending upon Diseased Teeth"; Mr. Henry Lee, "On Effects of Reflex Nervous Irritation from Syphilitic Disease of the Bones of the Skull."—Zoological.

WEDNESDAY. Society of Arts.—Royal Society of Literature.

THURSDAY. Royal.—Antiquarian.—Junior Medical, 8 P.M., Charing Cross Hospital: Mr. E. A. Brown, "On Excision of the Knee-Joint."

FRIDAY. Royal Institution.

SATURDAY. Asiatic.—Army Medical and Surgical, 7.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MAY 11TH, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys .. 1013 Girls .. 922	1935	1219
Average of corresponding weeks 1851-60		1622	1171

Barometer:
Highest (Tu.) 30.257; lowest (Sun.) 29.654; mean 30.049.

Thermometer:
Highest in sun—extremes (Th.) 113 degs.; (Mon.) 69 degs.
In shade—highest (Th.) 77 degrees; lowest (Tu.) 33.7 degrees.
Mean—51.9 degrees; difference from mean of 43 yrs.—0.3 deg.
Range—during week, 43.3 degrees; mean daily, 23.1 degrees.

Mean humidity of air (*saturation*=100), 80.

Mean direction of wind, N.E.—Rain in inches, 0.06.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PROPAGATION OF TYPHOID FEVER. — Professor Gietl of Munich has just published a pamphlet on the propagation of typhoid fever, in which he puts forward views identical with those which Dr. Wm. Budd has been so long endeavouring to enforce on the same subject. The case is indeed so complete in Dr. Budd's papers, as to stand in need of no corroboration; but the promulgation of similar views by a great German professor, will, probably, help to their adoption by the large body who look for their opinions, not to evidence, but to authority.

M. A. B.—We beg to assure our correspondent that the communications referred to were not kept from insertion for any other reason than this; viz., because the subject was considered by us to have been already sufficiently discussed for the occasion. Every one must respect the efforts of our correspondent in so good a cause.

MILES must be aware that we cannot notice anonymous correspondents, and especially in matters of the kind which his communications suggest; viz., "Alleged Abuses at the Royal College of Surgeons."

Mr. T. O'CONNOR sends an account of a case in which a Coroner, to all appearance, neglected his duty in not ordering a *post mortem* examination in order to ascertain the cause of death. This complaint is unfortunately one of too frequent occurrence. The mischief lies in this: that the Coroner has the power to grant or not an order for the examination, as pleases himself. Some Coroners fully carry out the duties of their offices, and some do not—showing that there is no general principle to guide their conduct in such cases. Mr. O'Connor writes:—"With regard to the present case, I do not hesitate to venture the following speculation, that not one of the persons engaged in the inquiry, including the Coroner, has the most remote idea of what was the cause of death; and that if the depositions taken at the inquest be produced, there will be nothing found in them to satisfy any person capable of forming a correct judicial opinion on the matter that the inquest might as well not have been held. I have said enough to direct attention to the absurdity of holding inquests without taking the ordinary and evident means to make them effective; namely, the examination of the body by some medical practitioner. Inquests should never be instituted on light or capricious grounds; but, when resolved upon, they should be complete, and the verdict such as would leave no doubt of the cause of death."

MICROSCOPES.—A correspondent asks: "Where he could best purchase a microscope for medical and general purposes of moderate power and the most simple construction?" [Any of the following makers will be able to supply our correspondent with the article he wants:—Mr. Highley, 70, Dean Street, W.C.; Mr. Matthews, Portugal Street, Lincoln's Inn; Mr. Salmon, 100, Fenchurch Street. EDITOR.]

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*
Worcester, May 1861.

COMMUNICATIONS have been received from:—Mr. HENRY LEE; Dr. JAMES RUSSELL; Dr. M'WILLIAM; Dr. P. H. WILLIAMS; Dr. J. G. DAVEY; Mr. J. J. MURRAY; Dr. J. B. PITT; Mr. R. SEPHTON; Dr. MARSH; Mr. H. LANKESTER; Dr. WATERS; Mr. A. SQUIRE; Dr. MERRIMAN; Dr. J. W. MILLER; Mr. J. GARNER; Dr. M. FOSTER; Mr. J. RHODES; Mr. R. CLARK; Dr. J. WILLIAMS; Mr. R. FREEMAN; Mr. H. C. WOODS; Mr. W. F. CLEVELAND; Mr. E. GARRAWAY; Mr. JOHN GAY; Mr. T. M. STONE; Mr. C. SHAW; Mr. C. WILLIAMS; and DR. CRUISE.

ADVERTISEMENTS.

British Medical Association: METROPOLITAN DISTRICT.—A Special General Meeting of the Metropolitan Counties Branch, and of all other Members of the Association residing in the Metropolitan District, will be held at 37, Soho Square, on Tuesday, June 4, at 4 p.m. precisely, for the purpose of selecting a Member to be recommended to the ensuing General Meeting of the Association at Canterbury, to fill the Office of PRESIDENT of the Association in 1862, in which year it is expected that the General Meeting will be held in London.

By order of the Council of the Metropolitan Counties Branch.
A. P. STEWART, M.D. } Honorary
ALEXANDER HENRY, M.D. } Secretaries.

Clinical Records
OF
THE LOCK HOSPITAL.

BY
HENRY LEE, ESQ., F.R.C.S.,
SURGEON TO THE HOSPITAL.

III.—LYMPHATIC ABSORPTION (*continued*).

IN a very able and scientific communication on the Carbuncular Type of Disease, published by Dr. D. Nelson in the BRITISH MEDICAL JOURNAL for March 30th, the learned author writes as follows:—"Lastly, and clearest of all, we have the syphilitic virus, with its manifestly visible existence, specific nature, and specific effects. Introduced into the frame at one point or another, we have, without any accompanying fever, the first local effect; then the *creeping of the virus through the absorbents from gland to gland;* next its entrance into the venous channels, and its diffusion through the general mass of the blood." (P. 330.)

This description of the way in which the syphilitic poison enters a patient's constitution is perfectly in accordance with the theory developed by Hunter, and is that which, upon Hunter's authority, is generally acknowledged at the present time. So frequent, indeed, is the absorption of the syphilitic poison associated in the periodical literature of the day with the occurrence of bubo, that any particular instance might well pass unnoticed; but the accurate and scientific tone which has been assumed by the BRITISH MEDICAL JOURNAL during the present year gives a peculiar influence and weight to the doctrines which are recorded in its pages. More than usual care, therefore, is required that nothing should there appear, which those who have not time or opportunity to investigate for themselves may not confidently receive as having had the sanction of its present editor.

Now, with regard to the point before us, is it true that the syphilitic poison does find its way into the blood through the absorbent glands and vessels? This point was considered at some length in my last communication (No. II of the *Records of the Lock Hospital*); and I believe that, both theoretically and practically, it is proved to demonstration that the syphilitic virus does not, as such, pass from gland to gland. The conclusion to which I have long arrived is, that the syphilitic poison, when it is absorbed, enters the system directly through the blood of the affected part, quite independently of the lymphatic glands or vessels. Like the vaccine poison, it exercises its influence first upon the inoculated point, and through it, by means of the circulation of the blood, upon the general system.

But it may be asked, If the pus from a syphilitic sore can be traced as far as the first lymphatic gland, does it never pass through that gland towards the general circulation? To this it must be answered, that in certain rare cases, in which the functions of the glands have in some way become impaired, the diseased action, if not the diseased secretion, is transmitted to the lymphatic glands second in order within the body; and from these again to others, until the disease reaches the thoracic duct.

In such exceptional cases, what is the constitutional disease produced? It is not constitutional syphilis, but some form of blood-poisoning. The diseases produced are allied to those cases of pyæmia such as occur after childbirth, in which the lymphatic glands within the abdomen have been found in a state of suppuration.

From whatever source the morbid action is originally derived in such instances, the results, as far as the general system is concerned, are very much the same. These may develope themselves as in other cases of septic or purulent infection, in the formation of secondary abscesses, in the separation of large masses of fibrine from the other elements of the blood, or in the incipient decomposition of that fluid and the various organs to which, in its decomposing state, it is sent.

A well marked and remarkable case of the second form of disease here mentioned lately occurred at the Lock Hospital, in which, the first series of glands having been destroyed, the diseased action extended within the abdomen. The poisoned condition of blood was evinced by an attack of ill-developed erysipelas, and, as shown in the accompanying illustrations, was followed by the deposition of large quantities of tough decolorised fibrine in the cavities of the heart, in the aorta, and in the pulmonary artery.

CASE. Harriet C., aged 20, was admitted into the Lock Hospital on January 12th, 1861, having until within a fortnight previously been an out-patient at St. Thomas's. She stated that for eight months previously she had suffered from discharge, and had also had sores upon the labia. When she was admitted into the Lock, there was a sloughing ulcer within the vagina, and a sloughing bubo in the left groin. The parts around presented a dark erysipelatous blush, which extended over the right side of the stomach and down the right thigh. The erysipelas had at this time existed three days.

Jan. 13th. The erysipelas had spread rapidly, and extended over the back and thighs. It presented an ill-defined margin, the colour fading insensibly into that of the surrounding skin. She had suffered from diarrhœa during the night, and been slightly delirious.

Jan. 15th. The countenance was flushed and anxious; pulse full and quick; continual vomiting; pain in the abdomen, with great tenderness on pressure over its lower part.

Jan. 17th. The erysipelas continued to spread with an ill-defined margin. The sickness continued; no difficulty of breathing.

Jan. 18th. Pulse quick and very weak. She took very little notice of surrounding objects, except when roused. Pupils dilated; no difficulty of breathing. She died in the course of the day.

Upon a *post mortem* examination, the superficial glands in the left groin appeared to have been quite destroyed by sloughing; the lumbar glands were much enlarged, and of a dark colour. When cut into, several of them discharged a thick brownish fluid. The peritoneal cavity contained a quantity of turbid serum. The structure of the different organs throughout the body was perfectly healthy, with the exception of the kidneys, which were larger, softer, and more vascular than usual. The right auricle was filled with firmly adherent decolorised fibrine. This was continued into the right ventricle, where it also had contracted some very firm adhesions. From the right ventricle [illegible] prolonged through the pulmonary artery, taking [illegible]. In rate mould of the semilunar valves, into its smaller branches on both sides. (Fig. 1.)

The left auricle also contained decolorised fibrine in less quantity, and less firmly adherent, than on the right side. In the left ventricle was an elongated mass continuous with that in the left auricle, which, following the course of the circulation, extended for a considerable distance into the aorta. As on the right side, the fibrine here retained an accurate mould of the semilunar valves. But perhaps the most interesting point about the case was, that continuous and adherent plugs of fibrine had been prolonged into both coronary arteries. (Fig. 2.)

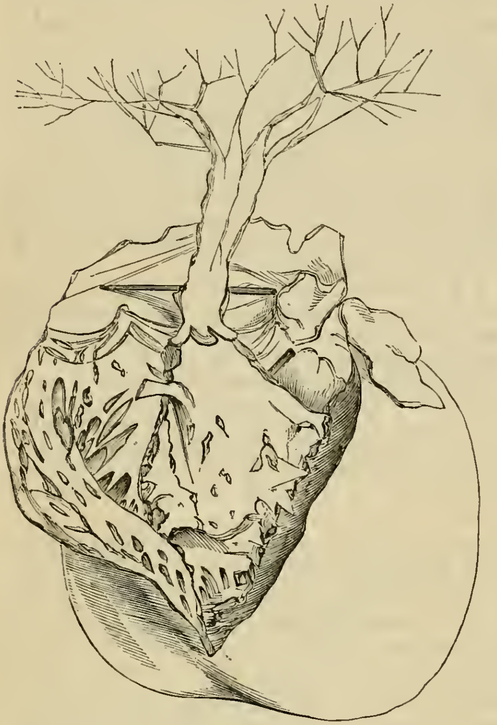

Fig. 1.—Right side of heart, with adherent fibrinous prolongations extending into branches of both pulmonary arteries.

In this case, then, the course of the disease could be sufficiently clearly traced. The suppurative action was continued from the original disease to the inguinal glands, where, in the very great majority of cases, it would have been arrested. But, these glands having lost their functions, the entrance of the morbid matter into the lymphatics beyond was no longer prevented. The door was forced; and the diseased action was continued to the lumbar glands, which were themselves found to be in a state of imperfect suppuration. The right side of the heart, which first received the contaminated blood, was found to contain large masses of fibrine, deposited in consequence of the admixture of morbid products. This fibrine had evidently followed the course of the circulation to the smaller pulmonary arteries. On the left side, the deposit of fibrine was less, and of a somewhat different character; but the results the same diseased action were here fully shewn.

t the deposition of fibrine in this case de- upon the direct admixture of morbid products (traced in their course towards the heart through the lumbar glands), I conclude to be demonstrated by the fact that exactly the same result may be produced by the mechanical introduction of some morbid secretion into the blood. Several cases

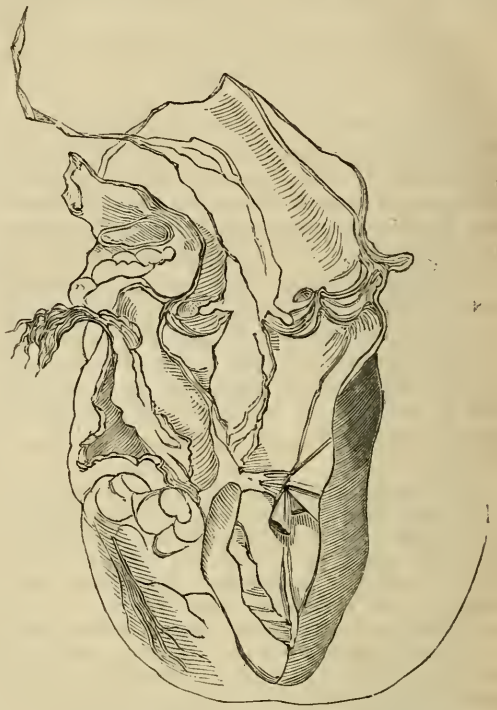

Fig. 2.—Left side of heart, with firmly adherent fibrinous mass, extending into aorta and plugging coronary arteries.

of this kind are published in the introduction to my *Pathological and Surgical Essays.* The results are similar, whether the morbid matter be introduced to the general circulation through the absorbents, through the veins as in ordinary pyæmia, or by artificial means. Specimens of the deposition of decolorised fibrine, adhering firmly to the heart and branching into the pulmonary arteries, may be seen from each of the above mentioned causes in the museum of King's College. From whatever cause arising, this clogging of the circulation on the right side of the heart is generally attended with intense difficulty of breathing, or rather, with a struggling for more breath than is supplied to the lungs. One reason for this doubtless is that, the right side of the heart and the pulmonary artery being partly obstructed, the quantity of blood sent to the lungs to be purified bears an inadequate relation to the amount that is vitiated in the general circulation; and the sense of the imperfect purification of the mass of the blood it is that produces the gasping for breath which is so general in these cases.

But in the instance before us there was no particular difficulty of breathing. Now, this is accounted for by both sides of the heart having been similarly affected. The circulation through the lungs was, no doubt, greatly interfered with; but so was the general circulation through the body, and particularly through the heart itself; so that the balance

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between the amount of blood vitiated and purified was tolerably well maintained. The patient then did not die, as is usual in such cases, from imperfect oxygenation of the blood, but from the gradual obstruction to the general circulation.

The plugging of the coronary arteries, by which a due supply of blood to the heart itself was prevented, probably contributed in the greatest degree to the fatal result.

The above case is given as an extreme instance of the result of the introduction of morbid matters into the circulation through the lymphatics. That minor degrees of blood-poisoning often take place, when the lymphatic glands have more or less lost their natural functions, is very probable. Thus, after sloughing or suppurating buboes, a patient will not unfrequently have a series of ill-developed boils, or an eruption of an anomalous character; but these must carefully be distinguished from the effects of the syphilitic poison, which, as has already been shown, does not affect a patient's constitution through the lymphatic glands.

Original Communications.

HYDROCEPHALUS OF FIFTEEN YEARS DURATION;

TUBERCLES AT THE BASE OF THE LUNGS ONLY: GANGRENE OF ONE LUNG.

By S. W. J. Merriman, M.D., Physician-Accoucheur to the Western General Dispensary.

Alfred Loader was born in October 1845, the child of parents who appear to be healthy, are still living, and have had several other children before and after Alfred. All of them, however, present symptoms of scrofula; the eldest having a more or less imperfect sight, and forgetfulness of what he has to do, partially relieved on several occasions by good food and tonic medicines, combined with bichloride of mercury. Alfred is reported to have been healthy until the age of three months, when he fell out of bed, and was seized with a species of convulsion and with sickness. At about the age of eight months, a chronic form of hydrocephalus was distinctly visible.

My first knowledge of him was on January 22, 1849, when he was three years and three months old. He was brought to my house in a child's four-wheel chaise; certain it is that for a long time he was carried about in this way, until he became too long-legged to be contained in the chaise. He was troubled with convulsions, described as stretching himself on awakening; there was no foaming at the mouth. He had been suckled for two years. The head had become quite recently perfectly closed; and his mother was doubtful if it had increased in size lately. Its measurements were then 24½ inches round, 14 inches from ear to ear over the top of the head, and 17 inches from the bridge of the nose to the neck under the occiput. He was intelligent, liking toys, but having very little powers of mind. His legs were perfectly useless; so that he could only sit or lie, resting his head upon a pillow from which he was unable to move it, though he had some power of rolling it from side to side. The urine and fæces passed from him without his knowledge; and this defect lasted all his life, for, although he became aware of having passed his evacuations, he never had power over the sphincter muscles. He had all his teeth; but they were decayed in the upper jaw. He preferred bread and milk, but would eat everything. If laid on his face, he would cry all the day after, as if he was hurt in his head. I ordered, with other things, friction of the back and hips with flour mixed with powdered nutmeg.

On February 13th I saw him again, and have recorded that he tried to sit up more, but in other respects was the same. I then ordered him one grain of bichloride of mercury in a four-ounce mixture, of which he was to take one teaspoonful twice a day, making thus one thirty-second of a grain for a dose. This medicine apparently purged him, and was omitted on the 16th; but on the 19th, as he complained of his head, I increased the mixture to six ounces, and ordered half a teaspoonful, thus giving one ninety-sixth of a grain twice a day, but was again obliged to discontinue it.

March 19. About this time he over balanced himself in a little chair in which he used to sit, resting his head upon a pillow, with his legs dangling, and perfectly useless. On this day he also ate pork, and had a convulsive fit at 6 P.M., for which he had calomel every two hours, and aperients; this treatment was succeeded, in April, by bark.

In May, he was as well again as ever; but in July, he had another attack of convulsions, requiring calomel, etc.

Dec. 17. On this day I find the following memorandum:—"Child grows stronger; can raise his head," for a single instant at a time. He never lost this increase of strength; but afterwards always held his head upright, not requiring a pillow.

Sept. 2, 1850. Age nearly five years. I was asked to visit him this morning, as his mother on getting up found him in a fit, with his arms and legs thrown about, his eyes fixed, the right side of his face working, and foam at the mouth. The fit lasted ten minutes after the mother rose. He was described as waking up at night screaming, as if frightened by a dream. He is described in my note-book as about 34½ inches high; as knowing pictures of a dog, a cat, and a bird, but not of a horse or a cow; but he had seldom or never seen any such animals, as he could not look out of the window. He noticed all that passed in the house.

On Sept. 4 he was pretty well.

Feb. 16, 1852. He was reported to have had a fit; which, however, passed off again.

I heard of him occasionally during the next six years, but was seldom asked to prescribe for him, his health continuing good, and his mind gradually developing itself, though never to any great extent.

March 2, 1858. Age twelve years and a half. This day I found him suffering from slight paralysis of one side of the face. I ordered him repeated doses of hydrargyrum cum cretâ, with compound chalk powder and soda, and visited him several times this month. He improved much; but there was still some flatness of the face on March 29th.

On July 27, he had another fit; and in August I have a remark that his mouth was still drawn. My notes at this period are very meagre. I was attending the child from the Dispensary, and did not, therefore, enter the case in my private note-book. There did not seem much the matter with him, but this flatness of one side of the face; and this lasted, for, on July 20, 1860, I find that I ordered him some bichloride of mercury. The distance of the parents from the Dispensary, and from my house, with the uniform condition of the child, prevented the treatment from being carried out quite as I desired.

I have now reached the year 1861, when his last illness was upon him.

On Jan. 3, 1861, his age being fifteen years and three months, he presented the appearance of being "baned" by the cold, being thin, miserable, and never warm. In two days, however, he was again sitting up. On the 20th, he was seized with fits, for which I ordered calomel and compound antimonial powder, and a blister, which was not applied. The fits ceased within half an hour of my visit; and he recovered his senses, and was become much better, when on the 30th he overbalanced himself and fell out of his chair. He was very much frightened by his fall, and complained of his head for a few days. I may, with propriety, observe that he had very little power of describing the situation of pain; it was in his head, or in his stomach, but he would seldom point out with his hand where the pain was seated; and as he always lay in one posture, it was very difficult to examine the various parts of his body; he had also lost a great deal of strength.

On March 1, I found him again sitting in his chair; but his cough, which he had had for some time, was very violent. His position rendered it very difficult to auscultate the chest; and when I did put the stethoscope to the apices of the lungs, I did not find much the matter, as will be shewn presently. During the month of March I saw him frequently. His suffering was great from disturbance of the *primæ viæ*, requiring frequent purgative doses, and his cough was extremely violent, not yielding at all to sedatives.

With a slight improvement during April, he gradually sank, and died on May 5th.

EXAMINATION OF THE BODY, twenty-one hours after death; Mr. Banner of Delamere Street assisting. The body presented a curved appearance; partly in consequence of not having been laid out straight directly after death, partly in consequence of the legs having been drawn up always as he lay in bed, and partly from a projection of the head, which all but compelled him to lie invariably on the right side of the head and right half of the nates. On measuring the head, the various lengths found at three and a half years of age were again found, with a slight variation attributable to the amount of hair, and to a possible difference in the way of making the measurement. It was perfectly clear that the size of the head had not varied during twelve years. The scalp adhered more firmly than usual to the bone; and the skull was completely ossified all round with the exception of three or four spots, principally on the left parietal bone, where there was membrane only. None of these spots was larger than three-quarters of an inch across. The projection of the skull backwards was found to have been caused by the constant pressure on a pillow in infancy, when the expanded skull was still membranous, so that the fluid poured out into the ventricles had bulged out the membranous skull by its own resistance to pressure; and when I mention that the ventricles contained not less than three pints of a serous fluid, it will be readily understood how constant pressure on one side of the head should have produced a bulging out in that part where there was pressure only from the inside of the brain. The substance of the brain was firm, and perfectly healthy; nothing was found which could have given rise, directly, to the fits which the child had at intervals during his life, except the expansion of the substance of the brain. The veins running over the brain were large; but not a trace of tubercle could be found in the membranes.

On opening the chest, the right lung was found to be firmly adherent to the side of the chest, and the left slightly so. The presenting part of the lungs appeared healthy, but inclined to be emphysematous. On removal of the lungs, the adhesions on the right side were so firm that the lung itself was torn through, disclosing a gangrenous portion; and the bases of both lungs were full of tubercles, and in a state of inflammation, being filled with blood, partly, of course, from gravitation after death. The upper lobes of the lungs did not contain a single tubercle, and it was clear that the aëration of the blood must have been recently performed solely by them.

The gangrenous portion of the lung was precisely that part upon which the child lay, and from which he could not have been moved without great resistance on his part, for he invariably lay in one position; but I conceive that his complaining of pain in the stomach must have been caused by this inflammation at the base of the lungs; for no disease, except enlargement of the mesenteric glands, was found in the abdominal cavity. I may mention that the pubes was covered with hair, but there were no other symptoms of puberty.

I believe that the effusion of serum into the ventricles of the brain, at the age of from three months to a year, was completely stopped at that time, and that a state of health supervened; such health as could exist with three pints of fluid in the centre of the brain; that the fits which he experienced from time to time were brought on by some irritation of the stomach from indigestion acting upon the overloaded and expanded brain, and that intelligence was slowly developed as the extended masses of brain matter received strength from age. To speak of intelligence seems hardly correct; it was the intelligence of a mere child coupled with some powers of observation on what was said or done in his presence, as he often told his mother what had occurred during the day; but I believe that he could not always recall to memory my name, though he knew me perfectly when I called to see him or some of his brothers and sisters, yet, I was told, he often spoke of me.

3, Charles Street, Westbourne Terrace.

CUTANEOUS ERUPTION PRODUCED BY BUTTERCUPS.

By EDWARD GARRAWAY, Esq., Faversham.

A LITTLE girl, aged 5, was brought to me a few days since, whose legs, from the hips downwards, were covered with a mixture of vesications, bullæ, and pustules, of the most anomalous character. Here and there would appear a perfect specimen of the *pompholyx solitarius* of Willan and Bateman; then blisters of indefinable shape, some being two or three inches in length, and perhaps the eighth of an inch in breadth, looking as if the part had been scored by a hot iron; near these would be large prominent globular pustules, resembling *scabies purulenta*. There was more or less erysipelatous redness accompanying the eruption, together with a certain amount of febrile action. My diagnosis was at a nonplus. However, a few questions solved the mystery. It appeared that the little girl, three days before, had gathered a large handful of buttercups, and, delighted with her acquisition, had taken them to bed with her; in the morning they were discovered, scattered, crushed, and faded, between the sheets.

On going to the roadside where the flowers were gathered, I discovered them to be the common *ranunculus bulbosus.*

The question suggests itself, how far the juice of this tribe of plants might be rendered available as a counter-irritant. I think I have heard of professional beggars producing artificial sores by buttercup-juice, but am not sure of this.

AMERICAN NAVY. The following naval general orders on rank and precedence have been issued:—Surgeons of the fleet, and surgeons of more than twelve years, rank with commanders. Surgeons of less than twelve years, rank with lieutenants. Passed assistant-surgeons rank next after lieutenants. Assistant-surgeons rank next after masters. Commanders and executive officers, of whatever grade, while on duty, take precedence of surgeons.

Transactions of Branches.

BATH AND BRISTOL BRANCH.

DIPHTHERIA.

By William Budd, M.D., Clifton, Senior Physician to the Bristol Royal Infirmary.

[*Read April* 25.]

I have no intention of writing a systematic treatise on diphtheria. Whether this disease be new to Britain, or merely an old pest well known to our forefathers, but new to this generation only—from what quarter it has now come, and by what steps it has gained its present footing among us—are questions which, with many others of great and various interest, I shall not here discuss. The object of this paper is purely practical, and is limited to a brief account of a method which I have found very successful in the treatment of the malady, and of measures by which I believe its spread may be much stayed, where not altogether prevented.

In dealing with these topics, I shall take that of treatment first.

In the management of diphtheria some lay the chief stress on local, others on general means. Those are, probably, nearer the truth who hold that to do the right thing, both locally and generally, is almost equally essential to success.

Of the efficacy of local measures there can, I imagine, be little doubt. Granting that the first appearance of the characteristic concretion is the result of an antecedent taint of the blood, there is good reason to believe that the fatal extension of this concretion from the tonsil to the windpipe is due to a surface propagation of the specific morbid changes; and that, if these changes be arrested or modified, the extension in question does not take place.

The grounds on which this opinion is founded must be so familiar to all who have given the subject any consideration, that it would be a waste of time to dwell upon them. The all but universal resort to local measures, and the great stress laid—and, I believe, justly laid—upon their early employment, are founded on a tacit recognition of this view.

The importance of local treatment being admitted, the choice of the agent is the only remaining question. It is well known that a great variety of remedies have been suggested, of which each has its warm supporters. Diphtheria offers, indeed, one of those cases, not rare in physic, in which every man has his favourite nostrum.

If the list of the different local remedies which have obtained much favour be studied, it will be seen that the greater number have one important point in common. With few exceptions, they consist of chemical agents which possess, in a high degree, the power of staying catalytic and putrescent changes. It is, no doubt, on their common possession of this power that their virtue mainly depends.

About two years ago, on the strong recommendation of my brother, Dr. G. Budd, I began to employ Beaufoy's solution of chlorinated soda, undiluted. Before that time, I had tried most of the preparations in vogue; but this one has seemed to me so superior to them all, that I have since abandoned every other in its favour. In my hands, it has appeared to have more than all the advantages of the other remedies in common use, without any of their drawbacks.

In all the cases in which I have hitherto tried it—amounting now to fifteen—the local disease has begun to decline from the moment of its first application. An immediate subsidence of swelling in the lymphatics in the neighbourhood of this disease, has, in particular, always followed its use—a fact from which the inference seems pretty clear, that this agent may do much to prevent that secondary poisoning of the system by the absorption of putrescent matters from the throat, which, in many cases, has the chief hand in giving a malignant turn to the malady.

On the other hand, its employment is attended by little or no pain; it causes no inflammation, and it leads to none of those breaches of surface which are inseparable from the repeated use of powerful escharotics, and which, when once produced, often make convalescence so painful and protracted.

Lastly—and this alone is a consideration of the highest importance—by exercising a local disinfection in the very focus of the diphtheritic virus, there is reason to suppose that this preparation greatly lessens the contagious power of the malady.

A full bodied camel's-hair brush is the best instrument for applying it; and to insure its full efficacy, both as a curative and a sanitary agent, the throat should be thoroughly mopped with it as many as three or four times a day.

The general treatment adopted was, in all cases, in entire accordance with that now almost universally followed, in so far as this consists in a supporting plan, and a pretty liberal use of alcoholic liquors.

Diphtheria is the effect of a poison, whose chief characteristic it is to produce rapid septic changes; and to enable the body to resist these changes, an abundance of good nutriment, and a sufficiency of wine or spirit, are indispensable.

These are matters which, in this country at least, are so well understood, that I need not enter further into them. The only specialty to which I have to refer in connection with the medical treatment of the cases which form the subject of these remarks, was the administration of the tincture of sesquichloride of iron in considerable doses.

A brief narrative of some three or four cases in illustration will complete what I have to say on this branch of the subject.

Case i. Henry Wall, aged 12, an inmate of the Industrial School, Pennywell Road, a spare, delicate boy, small of his age, and often ailing, was admitted to the Bristol Royal Infirmary on the 1st Sept., 1859.

On admission, he presented the following state: Both tonsils much swollen, the uvula and velum highly injected and much bloated, as if œdematous. On the left tonsil was a dirty looking, ash coloured patch, an inch long, having the appearance of a slough, but consisting, in reality, of a distinct membranous concretion; there was a smaller patch of the same kind on the right side; the uvula and velum bore the marks of recent cauterisation by nitrate of silver. Throat very sore, and swallowing difficult; voice thick, as in quinsy, but not hoarse; no difficulty of breathing. Considerable external swelling, diffuse as well as glandular, under the angle of the jaw, where the tonsils, also, could be felt, as large masses very tender to pressure. Movement of the neck stiff and painful. Pulse 124; skin cool; prostration considerable. No discharge from the nostrils.

He was ordered half a drachm of tincture of sesquichloride of iron every four hours; the throat to be mopped out with Beaufoy's solution four times a day; and a dietary which included, with other things, a pint of milk, two eggs, and four ounces of sherry.

At nine the same evening, his throat was much better; less swollen; less painful; and he could swallow more easily. The ash-coloured patch had disappeared. He had spat up, since the mid-day visit, an ounce and a half of sanious looking fluid, containing numerous flakes of the characteristic concretion.

Sept. 2. Throat still better; submaxillary swelling almost gone; tonsils much smaller; swallowing much more easy, and scarcely attended with any pain. A small brownish patch occupied the place of the large white concretion on the left tonsil. A distinct membranous layer extended over the back of the pharynx, and, on the left side, the velum, and, for a short space, the hard palate, also, were coated by it. The spitting dish was nearly full of a viscid fluid containing numerous membranous flakes. Pulse 104. General state much improved.

As I had had, at that time, only a limited experience of the chlorinated solution, and considering the throat to be in a state likely to be benefited by a caustic application, the Beaufoy's solution was given up, and a solution of nitrate of silver, in the proportion of a drachm to an ounce, was substituted for it.

On the following day, he was, in all ways, worse. Tonsils, and the right especially, much more swollen; both tonsils coated with a thick white membranous layer. Throat more painful, and swallowing difficult; jaw stiff and difficult to open; submaxillary swelling considerable; lymphatic glands again enlarged. He looked much more ill and suffering. The nitrate of silver was consequently given up, and the use of the Beaufoy resumed.

On the next day he was again much better; swelling of tonsils much reduced; external swelling gone. Throat scarcely, if at all, painful; swallowing easily. A small patch of white membrane on each tonsil was all that remained of diphtheritic affection. Tonsils, uvula, and velum florid, and healthy looking. Pulse 96. General condition altogether satisfactory.

From this time he continued to improve from day to day. On the 9th, he was well enough to get up, and was promoted to middle diet. On the 18th, he left the hospital quite well.

The rapid improvement in the state of the throat which followed the first employment of the Beaufoy; the relapse which occurred when this agent was left off; and the immediate change for the better which again ensued on its resumption, and steadily continued under its continued use, are incidents which should not be overlooked in this history.

One circumstance yet remains to be mentioned in connection with this case, which imparts an additional interest to it. Five days before the admission of H. Wall, a lad who had been admitted to the Pennywell Road School two days before, and who, while there, occupied the next bed to his, was brought to the Infirmary in an early stage of diphtheria. The house-surgeon, Mr. Powell, to whom the disease was, at that time, new, treated the case as one of common sore-throat. Two days afterwards, late at night, this boy was again brought to the Infirmary, being then in a dying state. The disease, which on his former visit was confined to the tonsils, had extended to the bronchial tubes. About four hours after admission, he died of gradual suffocation.

The specimen on the table was taken from his body. The thick false membrane, of which it presents such a characteristic specimen, extended from the glottis to minute subdivisions of the bronchial tubes.

Case ii. Joseph Henessy, aged 13, from the Industrial School, Pennywell Road, was admitted to the Bristol Royal Infirmary on the 14th January, 1860. Five days before his throat had become sore, and "large kernels" appeared on each side, under the jaw. He was taken to Mr. Willett the same day, who applied caustic, and pronounced the case to be one of the prevalent bad sore-throat.

On the 15th, when I first saw him, he presented the following state:—Tonsils much swollen; the left in contact with the uvula, and coated with a distinct white concretion. Uvula and soft palate of a deep red, and much bloated. Throat very sore, and swallowing extremely difficult; much external fulness, with glandular enlargement. Jaw stiff, and difficult to open. Breathing at times much embarrassed, but voice not hoarse. Pulse 104. Heat of skin natural. Prostration considerable. The treatment was identical, in all respects, with that followed in the last case.

On the 16th, all bad symptoms had disappeared. No external swelling. Breathing free; swallowing easy; throat much less sore Tonsils still a good deal swelled, but without concretion. Pulse 88. In the preceding twenty-fours he had spat up three-quarters of a pint (by measure) of a frothy liquid, charged with opaque white flakes.

On the 17th, he was so much better that he was promoted to middle diet, and allowed to get up. Sputa in the twenty-four hours diminished to one fluid-ounce. He continued to improve rapidly from day to day, and in the course of a week left the hospital quite well.

Case iii. George Truman, aged 14, also from the Industrial School, Pennywell Road, was admitted to the Bristol Royal Infirmary on the 15th January, 1860. The throat first became sore five days before, and had grown gradually worse from that time. Three of his schoolfellows were reported as being laid up at the school with the same complaint.

On admission, tonsils swollen, and the left coated with a characteristic white false membrane. Uvula and velum bloated and livid. Swallowing painful. Neck stiff, and much swollen, externally, under the jaw. Breathing not embarrassed. Pulse 100. Heat of skin natural. Prostration moderate. Voice thick, but not hoarse. He was ordered twenty minims of tincture of sesquichloride of iron every four hours. Throat to be well mopped four times a day with Beaufoy's solution. Diet to include two eggs, a pint of milk, and four ounces of wine.

On the 17th, he was, in all respects, better. Tonsils much less swollen. No trace of false membrane visible. Swallowing much more easy. All external fulness gone.

On the 18th, he was convalescent. A slight enlargement of tonsils, with redness, being all that remained of the local disease. He was promoted to middle diet, and a few days afterwards left the house quite well.

Case iv. In the month of July last, being at Ilfracombe, I was asked by Mr. Stoneham to meet him in consultation in the case of a young gentleman, aged 18 years, in delicate health, who had been two days ill of diphtheria.

The tonsils were much swollen, and the left was coated over nearly its whole surface with a dirty white concretion. The velum and uvula were of a dark red, and much bloated. Throat extremely sore, and swallowing in the highest degree difficult. External fulness considerable, and movements of jaw stiff and painful. There was, however, no difficulty of breathing, and no hoarseness. Pulse 120. Skin hot. Prostration very great. The treatment was the same as in the other cases. A pint of claret to be taken daily. The tincture of sesquichloride of iron in the dose of half a drachm every four hours was given in infusion of quassia. On mopping the throat, the large flake on the left tonsil came away in the form of a distinct membrane of pretty strong coherence.

On the following day, he was, in every respect, better. A white patch of small extent was still to be seen on the left tonsil; but the swelling, external and internal, and all other signs of active disease, had much abated. The pulse was much less frequent, and the fever had nearly subsided. From that time his amendment was rapid, and in the course of a week he had quite recovered.

As in all the remaining cases the disease followed exactly the same course as in those already related, I need not give them in detail, It is enough to say, that in all the condition of the throat began to improve from the moment of the first employment of the disinfectant, and that the general disorder abated in the same proportion.

In four or five cases, ice was kept almost constantly in the mouth, and was a great comfort to the patient; and in the last six ten grains of chlorate of potash were given with each dose of the chalybeate. In two of these six, although the disease was at first very severe, the convalescence sat in earlier, and was more rapid than in any other that has hitherto come under my notice.

I need scarcely add that I am only anxious that the plan of treatment here set forth should be taken at its true worth, whatever that may be. In estimating its value we must, therefore, bear in mind that, although many of the cases in which it was employed were very severe, and threatened to become still more so, none of them presented the disease in its most malignant form. In none were the swelling and infiltration of the deep tissues of the neck excessive; in none did the breath, although often offensive, exhale that intolerable fœtor which is one of the surest signs of malignity. In none, as far as was ascertained (and in most the necessary examination was made more than once) was the urine albuminous. Neither did any of the cases occur in infancy, or in very early childhood, a period of life in which diphtheria is especially fatal. Whether the same measures would prove equally successful under these last named conditions, experience alone can show. Nevertheless, the results obtained in the foregoing and other cases have left a deep conviction on my mind that this plan of treating diphtheria is an eminently good one, and that, if put in force early in the disease, it is potent to save life.

As regards the efficacy of the several means, the evidence would seem to be most decisive in favour of the Beaufoy's solution. Very favourable results, however, have been obtained by a French physician, under the use of free doses of perchloride of iron, without the aid (as it would appear) of any topical applications. In the British Medical Journal for Jan. 12, of this year, under the head of "A New Method of Treating Diphtheria," an abstract is given of a paper read to the French Academy of Sciences on the 26th Nov., 1860, in which the writer states that of thirty-nine cases under his care and treated by this agent, within the last three years, thirty-five had recovered. This, for France especially—for the disease seems to be more fatal in France than in England—is a very high per centage of cures.*

I pass now to the measures which I believe to be best calculated to check the spread of the disease.

These measures are founded on two well established and pretty generally recognised facts. The first is that diphtheria is contagious, or (to use a word that avoids ambiguity) "catching"; the second, that the exuviæ from the surface on which the poison exerts its specific action possess, in an eminent degree, the power to propagate the disease.

Whether the malady ever originates *de novo* now—whether, as some think, it may be concocted anew in every foul sewer—although, for some strange reason, it is only lately *English* sewers have again learned to brew the noxious compound—are questions which I shall pass by for the present.

It is a sufficient ground for all I have to propose, that this is one of the diseases endowed with that most profound and remarkable of characteristics which consists in the formation in the infected body of a specific poison, which, on being cast off, has the power of communicating the same disease to other and yet healthy persons. The reality of this property in diphtheria is now, I believe, all but universally admitted. One or two facts in illustration of it will be sufficient for my present purpose.

In the summer of 1859, a servant girl, living at a farm in Monmouthshire, got leave from her mistress to go for a short time to help her sister, who lived seven or eight miles away, and whose children were all ill with "bad sore-throat." The day after her return to the farm this girl was herself seized with diphtheria, and narrowly escaped with life. The mistress, who paid her devoted attention, was her sole nurse. The girl was scarcely convalescent before the mistress was seized with the same malady, of which she died on the fourth day. The situation of the farm was very healthy, and there was no diphtheria, at that time, within several miles of it.

For the chief particulars of the next case I am indebted to my colleague, Dr. Fox.

On the 19th Sept., 1859, a child, named Smith, 7 years old, was brought to the Bristol Royal Infirmary, in diphtheria. In the preceding week, her mother, who lived near Jacob's Wells, had washed the clothes of two children who had died of diphtheria in Bellevue, Clifton. The child herself did not touch the clothes, nor the water in which they were washed; but the mother washed them with her own hands, and was constantly occupied about the child the while, cooking her food, cutting her bread, and helping her to dress. The child's case was severe. After remaining a month in the infirmary she went out well. The washerwoman herself, and several other members of the family, had the disease in a slight form.†

A third illustration I borrow from the masterly work of Gendron de l'Eure, on the *Epidemics of Small Localities*. It is given pretty nearly in the writer's own words.

"The dwelling-house Mairé, in the commune of Chenue, in the department of La Sarthe, is situated on the top of a lofty hill side, overlooking a broad plain, through which winds the river Loire. The homestead is isolated; its buildings are spacious, and the farm yard is laid out so as to give a rapid outfall to rain water. Trottin, the farmer, his wife, and five children—the eldest twelve years, and the youngest, an infant at the breast, nine months old—all slept in one large, well-ventilated room, warmed by a fire. The whole party were in excellent health, when, in the beginning of December 1827, a man, named Broissin, came to work at the farm, taking, also, his meals with the family. This man, when he first arrived, was already affected with membranous tonsillitis. The medical man who saw him assured me that his pharynx was coated with white patches, which peeled off in pieces like cooked white of egg, and of which portions floated in the bloody mucus expectorated.

"Eight days after this man first came into contact with the Trottin family, a little girl, 3 years old, seemed to have a cold. On the eighth day, she died of suffocation while the doctor was being sent for. In the course of another eight days, the youngest brother was attacked with vomiting and sore throat. Five days later still, the eldest brother was seized with the same malady. On 6th January, the elder sister, 9 years old, presented the first symptoms of diphtheria. Of the three last patients whom I visited in consultation with M. Lopingleux, the youngest was already *in extremis* when I first saw him. His elder brother, who had been his bedfellow, had been recently attacked, and in him the croupal patches were making rapid progress.

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* Since these notes were written, a very able and interesting paper on Diphtheria has appeared in the British Medical Journal for February 23rd, from the pen of Dr. Newman of Fulbeck, in which the writer speaks very highly of the internal use of tincture of muriate of iron. I see that Professor Trousseau, also, speaks strongly in its favour.

† At p. 103 of Dr. Jenner's lately published work on *Diphtheria*, the following passage occurs:—"There is not the shadow of ground for the belief that the disease can be carried by the clothes, etc., from one house to another." I could cite other facts beside that recorded in the text, to show that this assertion is far too sweeping.

"Finally, his sister had some slight redness of the pharynx. Nothing yet proved that she was about to have the disease. She had slept with the first patient, and twelve days elapsed between the death of that patient and the appearance of croup in this one. These four children, whose intercourse was so intimate, and who had all eaten from the same dish with the sick workman, were the only inmates of the farm attacked. The infant at the breast remained the whole time with impunity in the same room with her brothers and sisters."

The three instances just related will suffice in illustration of a point which, to most, must already be sufficiently familiar. The first position once admitted, the next will probably be readily conceded. If diphtheria be contagious, the antecedent probability that its one specific morbid product is charged, in a special degree, with the diphtheritic virus, is so great as almost to dispense with the need of particular proof. Evidence of its virulent power is, however, not wanting, sufficient to convince all who are not more than commonly sceptical.

The sad case of Gendron de l'Eure himself is one case in point. In the history of physic there are few things more touching than the death of this truly eminent man. The details of his last illness have already, in part, appeared in several English journals. Himself one of the first to record proof of the contagious nature of diphtheria; having, besides, by the invention of new instruments and the suggestion of new methods done much to render tracheotomy available in it, it was his singular fate to forfeit his own life in a vain attempt to rescue, by this operation, a patient who was dying of croupal suffocation. At the moment of opening the larynx, a mass of tracheal exudation, driven through the wound by a paroxysm of convulsive cough, suddenly bespattered his face and lips. Two days afterwards, the fatal patch appeared on his own tonsil, and the disease, rapidly spreading through the bronchial tubes, put an end to his life by asphyxia. Strange to say, M. Gendron narrowly escaped death once before from a precisely similar accident.

The equally sad fate of M. Valleix teaches the same lesson. Examining one day the throat of a diphtheritic patient, he had the misfortune to receive in his own open mouth some of the discharge from the diseased part. The next day he observed a small pellicle on one of his tonsils. The day after that, the whole pharynx was coated with the characteristic concretion, and in forty-eight hours from the date of his attack this distinguished physician died, without having presented any laryngeal symptom.

In the case of a country practitioner, recorded in the French medical journals, the evidence seems to be still closer. Having opened the windpipe in a case of diphtheria, and the patient being at the point of death from suffocation from the intrusion of blood into the aperture, this gentleman applied his own mouth to the wound, and, by a strong effort of suction, cleared the air-passage. After a short interval, he was himself seized with diphtheria, and rapidly fell a victim to it. The history of an American physician who also sacrificed his life to a similar act of self-devotion has lately gone the round of the journals.

But if the exudation from the throat has the power to convey diphtheria,* it is easy to see what an important bearing the fact must have on the dissemination of the disorder. Every one who has seen much of the disease, must have been struck with the very large quantity of morbid secretion often spat up by the patient.

In the first case in which I was consulted, the first thing that met my eye on entering the sick room was a basin containing from three parts of a pint to a pint of offensive mucus, thickly charged with diphtheritic flakes, the product of some sixteen hours secretion. The morbid process had been going on at the same rate for several days, and continued at the same rate for several days more. In addition to this, more than a dozen pocket handkerchiefs were soiled every day, the patient's mother told me, in wiping the mouth and nostrils. In more than one of the cases mentioned in this paper, the quantity of diphtheritic stuff spat up varied from half-a-pint to nearly a pint daily.

Let us now trace the history of this stuff a little further. In towns, after more or less delay, it is thrown into the privy or watercloset, whence it finds its way into the cesspool or sewer. In country places, a dungheap hard by the cottage door is its more common receptacle; or, failing the dungheap, it is cast into some open gutter which carries it, perhaps, by a slow current through the whole length of a village. Sometimes, again, flung out upon the soil under the rays of a burning sun, it is rapidly converted into dust, to be dispersed with every wind. As under all these forms the morbid product, probably, retains for a time its specific powers, it is easy to see how, under the strict law of continuous succession, cases may spring up without number which seem, at first sight, entirely to shut out the idea of such an origin. The great fact to bear in mind is, that in every severe case of diphtheria—at least where the patient has passed the period of infancy—not only the dwelling-house, but the soil around it, becomes infected with the diphtheritic poison, over an area which varies with the malignity of the case, the character of the soil, with the particular season, and, lastly, with the nature of the sanitary and other arrangements.

The tainted linen and the tainted hand of the nurse help also in the work of dissemination. I have already given an instance to show how the disease may be communicated by infected clothes. The tainted hand of the nurse is even more effective in propagating the disorder. In the poor man's cottage the mother generally fills this office, performing all the while her other household duties. Engaged incessantly in wiping the diphtheritic discharge from the mouth and nostrils of her sick child, her next act often is to employ the hand that has performed this perilous duty in cutting bread and butter for the rest. Not seldom the evil does not end here. From the cottage of the poor man things are often widely distributed, which soon find their way to the throats of other persons; and it is not difficult to see how, under the circumstances just described, these things may contract a taint the source of which is little suspected. Obvious as many, at least, of these reflections are, I cannot see that they have anywhere been acted on.

In most of the recent English works on Diphtheria, the contagious nature of the disease, if recognised at all, is dismissed in a few words, as an incident which is quite exceptional to it, and of altogether secondary importance. By no English writer that I have met with, is it made the ground of any special precaution. Still less is any stress laid on the infectious properties of the diphtheritic discharge. But if this discharge really have the power to propagate the disease, the fact is surely one of the highest practical moment. To have such knowledge as this, and to turn it to no account, is the height of thoughtlessness, if nothing worse. To make an end of the morbid product, as soon as cast forth, or at least to use all available means for preventing its deadly germs from taking fresh root, would be, one would have supposed, the one thought of the physician. In my own dealings with diphtheria, I have from the first put in force a few simple measures having this one object in view. These measures are embodied in the following rules:—

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* The failure of M. Trousseau and of his friend M. Peter to inoculate themselves with the disease, is, I need scarcely say, of no weight against this conclusion. Precisely similar failures might be cited in the case of plague, cow-pox, etc. But every one knows, notwithstanding, that cow-pox and plague are inoculable.

1. The patient to spit, when possible, into a basin or other vessel containing chloride of lime. A thick layer of the same chemical to be strewed over the contents as often as it becomes necessary to empty the receptacle.
2. Pocket-handkerchiefs to be proscribed, and small pieces of rag to be used instead, for wiping the nose and mouth: each piece of rag, after being once used, to be put in the fire.
3. Clean towels, a basin containing water charged with chloride of zinc or chloride of lime, and another basin with plain soap and water, to be at hand, in order that the nurse may wash her hands as often as they may become soiled by the discharge.
4. All tainted linen, immediately on its removal from patient, to be plunged in water charged with chloride of zinc, or some other disinfectant.
5. A wineglassful of a strong solution of chloride of zinc to be put in the night-pan on every occasion for its use.
6. All cups, glasses, and other articles used by, or about the patient, to be scrupulously cleaned before being used by others.

Simple as these measures are, I can easily imagine that cases will often occur, among the poor especially, where it will be difficult, if not impossible, to carry them out. This difficulty may, however, be indefinitely diminished by a little well-directed zeal on the part of the medical attendant. The case is one in which it may emphatically be said that, where there is a will there is a way. In my own practice, I have generally been able to enforce them to the letter. That by these, or by any other means, however well executed, it is possible entirely to prevent the spread of diphtheria, I have no idea. The poison is probably too subtle to be entirely intercepted in its migration by any means we can devise. But that by the employment of the measures here described, *aided by free ventilation of the sick room*, due separation of the sick from the healthy, and *the frequent application of Beaufoy's solution to the diseased throat*, much may be done to limit the area and diminish the risk of infection, I have no doubt. In particular, I believe that if all these things were done, we should seldom hear of those frightful tragedies frequently recorded in the public prints, in which three, four, and five members of a family, and often of a family in the higher class, have fallen one after another victims to the disorder. In my own experience, I have only known one instance, where these measures were adopted, in which the disease has spread beyond the person first attacked.

The Dentist's Servant. Is that man no mystery to us, no type of invisible power? The tremendous individual knows (who else does?) what is done with the extracted teeth; he knows what goes on in the little room where something is always being washed or filed; he knows what warm spicy infusion is put into the comfortable tumbler from which we rinse our wounded mouth, with a gap in it that feels a foot wide; he knows whether the thing we spit into is a fixture communicating with the Thames, or could be cleared away for a dance; he sees the horrible parlour when there are no patients in it, and he could reveal, if he would, what becomes of the Every-Day Book then. The conviction of my coward conscience when I see that man in a professional light, is, that he knows all the statistics of my teeth and gums, my double teeth, my single teeth, my stopped teeth, and my sound. In this Arcadian rest, I am fearless of him as of a harmless powerless creature in a Scotch cap, who adores a young lady in a voluminous crinoline, at a neighbouring billiard-room, and whose passion would be uninfluenced if every one of her teeth were false. They may be. He takes them all on trust.

Abstract

OF A PAPER

ON THE MOLECULAR THEORY OF ORGANISATION.

By John Hughes Bennett, M.D., F.R.S.E., Professor of the Institutes of Medicine and of Clinical Medicine in the University of Edinburgh.

[The following abstract is taken from the *Proceedings* of the Royal Society of Edinburgh, April 1st, 1861.]

Parodying the celebrated expression of Harvey, viz., *omne animal ex ovo*, it has been attempted to formularise the law of development by the expression *omnis cellula e cellulâ*, and to maintain "that we must not transfer the seat of real action to any point beyond the cell." (Virchow, *Eng. Trans.*, p. 3.) In the attempts which have been made to support this exclusive doctrine, and to give all the tissues and all vital properties a cell-origin, the great importance of the molecular element, it seemed to the author, had been strangely overlooked. It becomes important, therefore, to show that real action, both physical and vital, may be seated in minute particles, or molecules much smaller than cells, and that we must obtain a knowledge of such action in these molecules if we desire to comprehend the laws of organisation. To this end the author directed attention: 1. To a description of the nature and mode or origin of organic molecules; 2. To a demonstration of the fact that these molecules possess inherent powers or forces, and are present in all those tissues which manifest vital force; and 3. To a law which governs the combination, arrangement, and behaviour, of these molecules during the development of organised tissue.

I. By a *molecule* was understood a minute body, seen under high magnifying powers in all organic fluids and textures, varying in size from the four-thousandth of an inch down to a scarcely visible point, which may be calculated at much less than the twenty-thousandth of an inch in diameter. Optically it is distinguished according to its size—the smallest presenting dark or light points as the focus is changed, and the larger exhibiting a dark or light centre, surrounded by a distinctly shadowed ring. These last are frequently distinguished by the name of *granules*. The ultimate molecule had never been reached even with the highest magnifying powers. In the same manner that the astronomer with his telescope resolves nebulæ into clusters of stars, and sees other nebulæ beyond them, so the histologist with his microscope magnifies molecules into granules, and sees further molecules come into view. The chemical composition of these molecules must vary infinitely; but the author had been in the habit of classifying them into three groups, and referring them to—1. The albuminous, 2. The fatty, and 3. The mineral compounds. These constituents may be mingled together in various proportions so as to produce simple and compound molecules. In the vast majority of cases they are globular in shape; but they may be angular, square, and of various forms, They may differ in size, or be of tolerably uniform size, in the same liquid or substance. They may be regularly or irregularly diffused in the matter examined. Sometimes they are concentrated in particular places, and at others scattered in groups. Their colour is various. Most of the pigments in plants and animals are dependent on the formation of molecules, which in the human lung have been proved to be pure carbon, and in the tissues of plants and animals differently tinted kinds of fat or of wax.

These molecules may be formed in two different ways: —1. By precipitation in fluids; 2. By the disintegration of previously formed tissues. The former may be called *histogenetic* (ἱστος, a tissue; and γένεσις, generation), and the latter *histolytic* (ἱστος and λύσις, dissolution). They may be denominated molecules of formation and molecules of disintegration.

Histogenetic molecules are formed either from the union of two simple organic fluids, or from precipitations occurring in formative fluids, holding various substances in solution. Fourteen years ago, the author read to the Society a paper giving an account of the results obtained by a union of oil and liquid albumen, the two organic fluids from which molecular matter is most commonly derived. It was Dr. Ascherson of Berlin who first discovered the important fact, that the mere contact of oil and fluid albumen caused the latter to coagulate in the form of a membrane, which he called the haptogen membrane, from ἅπτομαὶ, I come into contact. A more complete mixture of two such drops produces, as is well known, a white opaque fluid or emulsion, which in structure exactly resembles milk: that is to say, it consists of molecules composed of a drop of oil surrounded by a layer or membrane of coagulated albumen. Such compound molecules, possessing the property of endosmose, may therefore readily be produced artificially, and by trituration can be reduced in size so as to resemble the elementary molecules in chyle or in the yolk of the egg. If oil and albumen be introduced into the stomach and intestinal canal, they are always so reduced; and one of the objects of digestion would appear to be separating from the food, and rendering fluid its oil and albumen, so as to produce the chyle molecules which are ultimately transformed into blood. Indeed, everywhere in living organisms it may be observed, that oil and albumen formed as secretions by plants, and entering the bodies of animals as food, either separately or united, constitute the chief origin of molecular formations.

Mr. Rainey has recently pointed out the condition which causes molecular mineral matter to assume the form of rounded nuclear bodies (*On the Mode of Formation of Shells of Animals, of Bone, and of several other Structures, by a Process of Molecular Coalescence*, etc.: by George Rainey, M.R.C.S., London, 1858). This condition is viscosity. If carbonate of lime be dissolved in water, the forms produced on its precipitation are crystalline; but if the fluid be glutinous, composed, for example, of fluid, gelatine, or gum, the forms produced are oval or globular. Precipitations made in this way, on slides of glass, closely resemble the appearances called nuclear or cellular in different stages of development. Mr. Rainey has further shown how starch-granules are produced in the juices of vegetables by the endosmose of gum into a cell containing a solution of dextrine (*Microscopical Journal*, 1859). In the same manner that the contact of oil and albumen produces oleo-albuminous molecules, so does the contact of gum and dextrine precipitate starch molecules. In this manner we can comprehend how the mixture of various organic fluids gives rise to particles of different kinds.

Histolytic molecules are the result of the transformation and disintegration of fluid and solid substances by chemical or mechanical action. They are generally larger in size than histogenetic molecules, are more purely fatty, and from being associated with the *débris* of broken down texture may, in most instances, readily be distinguished. Thus in the breaking up of cells and of muscles when they become fatty, or in the putrefaction of vegetable or animal matters, these may be seen to soften, lose their peculiar structure, break up, and ultimately be reduced to a molecular condition.

We shall subsequently see that these two kinds of molecules are constantly changing places; or, in other words, molecular matter formed from the process of disintegration may, when placed under peculiar circumstances, become the basis of matter which undergoes development. In nature, the breaking down of one substance is the necessary step to the formation of another, and the histolytic or disintegrative molecules of one period become the histogenetic or formative molecules of another. This fact constitutes the basis of the law which the author would subsequently seek to establish.

[*To be concluded.*]

Reviews and Notices.

Essays and Observations on Natural History, Anatomy, Physiology, Psychology, and Geology. By John Hunter, F.R.S., being his Posthumous Papers on those Subjects, arranged and revised, with Notes: to which are added, the Introductory Lectures on the Hunterian Collection of Fossil Remains, delivered in the Theatre of the Royal College of Surgeons of England. By Richard Owen, F.R.S., D.C.L. Vol. i, pp. 403. Vol. ii, pp. 507. London: 1861.

[*Concluded from page* 527.]

Next in order to the portion of the book which we noticed last week, comes a series of observations on a very different subject from the preceding—Psychology. These notes on the mental phenomena are conceived and expressed in the true Hunterian style; and while they are thus suggestive and inquiring rather than exhaustive, they afford an additional and interesting example of the variety of subjects to which the mind of their author was turned. We can find in them no apparent trace of any attempt at a metaphysical system, or of a deep study of metaphysical writers: they are rather to be taken—like, indeed, the greater part of the volume—as the expression of the ideas which, from his own observation and reflexion, Hunter had been led to form in his own mind.

The special subjects treated of in these Observations on Psychology, are—Consciousness; the Mind; the Action of the Brain; Reason; Ideas from Sensation; Command or Presence of Mind; Fear; Superstition; Deceit; Periods of Life, according to Appetites and Mental Operations; Hereditary Right; Sympathies; Appetite and Passion; Instinct; Imitation and Custom: and the chapter is concluded with the Miscellaneous Notes and Apophthegms of which a reprint was given in a former number of this journal.

In the notes on Consciousness, Hunter attempts the definition of this phenomenon, in contradistinction to sensation, conviction, and belief. Consciousness he regards as "the impression of the mind of its own existence at the time, or rather of the existence of the mind and its actions"; as "an act or impression of the mind which we cannot deny." The permanency of consciousness constitutes memory. While consciousness is regarded by Hunter as essentially "an act of the mind", he allows also that it may arise from sensation, but not from demonstrative sensation. Consciousness has always a relation to ourselves; while sensation, conviction, and belief, have relation to other bodies.

"Sensation and demonstration are absolute and the same, and stand first in order of evidence; they are that to which everybody gives assent.... Conviction is an impression on the mind, which is equal in that mind to sensation or demonstration; therefore it is not necessary first to produce sensation or demonstration. . . . A conviction of the truth of any proposition, is the same as feeling the force of any argument or proposition; it is a perfect belief. Belief is another impression of the mind, which is another substitute for sensation or demonstration, and which becomes also a cause of actions; but the impression is weaker than conviction, and is that which the mind or the reasoning faculty does not insist upon, as it does in conviction. It arises from a conveyance to the mind of a something that is supposed to exist, but not demonstrated, only possible or probable; it arises from reasoning, and it is more than probable it is peculiar to the human species. The first, or sensation or 'demonstration', is absolute; but the second, or 'conviction', and the third, or 'belief', may or may not be so. Conviction requires the greatest evidence next to demonstration; and conviction is a greater degree of belief. Consciousness generally relates to ourselves; it is not similar to a conviction of, or a belief in, other things." (P. 253.)

The remark in the foregoing extract, that "it is more than probable that belief is peculiar to the human species," bears a certain amount of resemblance to the doctrine put forth by M. Quatrefages, which we noticed a short time ago. The French naturalist, however, has gone further than Hunter, in attributing to man as a special characteristic the consciousness of right and wrong; for Hunter believed the consciousness of having done wrong to exist in some animals; *e.g.*, the dog.

The section on Instinct contains a curious comparison between this phenomenon and "general principles." Neither, says Hunter, will apply equally well to all cases with which they have an immediate connection; neither are fitted for, nor take notice of contingencies. When, then, a man does not see the variations in general principles required by the special circumstances of the case, and hence cannot alter his plan to meet contingencies, his action is precisely analogous to the instinctive proceeding of a bird in building its nest.

The term "general principles" in the passage to which we have just now referred, is used by Hunter in its ordinary modern acceptation; but in another section—that on Reason—he uses the expression apparently in the same sense as "hypothesis". In this section, he distinguishes the reasoning process as either "immediate", or "habitual".

"The immediate is, when we are obliged to go through the whole process before we can draw the conclusions; the habitual is when we are so well acquainted with the subject as to draw the conclusions at once, as it were jumping over the investigation; but this often leads us into errors by taking premises for granted." (P. 262.)

The "immediate" process of Hunter will be at once recognised as what is commonly known as "induction"; and it was evidently this process by which he sought to work. In another part of this section he more forcibly utters warning against hypothesis, while he does not absolutely condemn its necessary use.

"Reasoning is fallacious, if not based upon facts; but facts and reasoning should go hand in hand; for, if the facts are not able to support the reasoning, then the reasoning is good for nothing; they should always bear a due proportion. . . . . The man who judges from general principles only, shews ignorance; few things are so simple as to come wholly within a general principle. We should never reason on general principles only, much less practise upon them, when we are, or can be, master of the facts; but, where there is nothing else but the general principle, there we must take it for our guide." (P. 263.)

It is this last sentence to which we referred, when we just now said that Hunter appeared to use the term "general principles" in the sense of hypotheses.

We pass now to the notice of what ought to have been one of the most interesting divisions of the posthumous writings of Hunter—his Observations on Geology. We say, "ought to have been"; and we must express our great regret that, through circumstances which have already been placed before the profession, the readers of these volumes are deprived of the full opportunity of becoming acquainted with the thoughts of the great naturalist on a science which was in his days barely commencing to dawn into existence. It is true, that the Hunterian manuscript on geology has been published in quarto by the Council of the Royal College of Surgeons of England; but how much more complete would it have made the present work, and how much more appropriate would it have been, if that learned body had accorded to Professor Owen the permission to publish it in connection with the other Hunterian writings. Well! we suppose we must make the best of the matter; anyhow, we shall try to do so, and gather what information we can from the extracts from Hunter's geological essay given by Professor Owen in his lectures, and from the comments made by the learned professor on it and on the state of geological science at the time when it was written.

Previously to the announcement by Professor Owen, in his lectures at the Royal College of Surgeons, of the existence of the interesting essay which forms the special subject of his comments, the scientific world was but little aware of the amount of attention which had been given by Hunter to geology in common with other departments of natural history.

In 1793, indeed, Hunter had communicated to the Royal Society a paper "On the Fossil Bones presented by His Most Serene Highness the Margrave of Anspach"; but this essay, though published in the *Philosophical Transactions*, gave but an imperfect idea of the depth of his researches, and was even underrated by the usually exact Cuvier, who characterised it as having in view only the chemical analysis of the fossils. This essay, however, had a wider aim; for, while in it the author fully described the different conditions in which the original matter might be found in petrified bones, teeth, and shells, he also compared the fossils described with recent animals. As Professor Owen says, he "determined their generic affinity to the bear, and shewed not only that they differed from any of the species with which he was able to compare them, but also that the fossils differed from each other."

But the traditionary history of the paper containing the highest development of Hunter's doctrines on Palæontology, is remarkable, as showing how much he anticipated the views held by men of a later time, and which have but gradually obtained a hold on the scientific mind. The essay to which we refer was the result of a further elaboration of the researches described in his first essay, and of the ideas arising therefrom. In his first paper, he alluded to the "thousands of years" required for certain geological operations; and, in the second, he carried his expression of the immense expanse of time demanded to such an extent, as thoroughly frightened his advisers and the Council of the Royal Society. Mr. Owen gives the following account as communicated by Mr. Clift, who had heard it from Sir Everard Home.

> "The attention of the Secretaries or Council of the Royal Society had been called, by some of the Fellows, to the expressions in the first paper, on the 'thousands of years' required for such and such geological phenomena; and, in the second memoir, the Secretaries found that a chronology of the earth, widely different from the usually accepted one, was more directly and emphatically affirmed by the author as essential to the rational comprehension of the phenomena to be treated of; while, at the same time, the adequacy of the chief or sole geological dynamic at that time recognised, viz., the Mosaic deluge, to account for the presence of marine fossils on land, was called in question. Considerations for the repute and interests of the author himself may have swayed his advisers in the recommendation to him to submit the MS. to a geological friend, before finally sending it in for formal acceptance and perusal before the Society. Major Rennell, author of some papers in the *Philosophical Transactions* on 'Tides and Currents, and other Geographical Subjects,' undertook the delicate task of submitting to Hunter the misgivings of the authorities mainly responsible for the publications of the Royal Society. He did it in these words: 'This leads me to remark that, in page 3, you have used the term 'many thousand centuries,' which brings us almost to the *yogues* of the Hindoos. Now, although I have no quarrel with any opinions relating to the antiquity of the globe, yet there are a description of persons very numerous and very respectable in every point but their pardonable superstitions, who will dislike any mention of a specific period that ascends beyond 6000 years; I would, therefore, with submission, qualify the expression by many thousand *years*, instead of *centuries*.' Hunter would not modify his statements, and he withdrew the paper." (Pp. 293-4.)

Such is the account placed on record by Professor Owen of the cautious manner in which the scientific world of the last century looked on doctrines which militated against the teachings previously received regarding the age of the world. And, although at the present day those who are convinced of the truth which Hunter attempted to set forth form the majority, yet there are some who still hold to the six thousand years, and believe any extension of this to be at variance with the sacred writings. This is not the time and place for fully discussing the subject; but we cannot see how true reverence for the sacred writings should be diminished by the reception of the geological chronology, any more than it has been diminished by the recognition of the fact that the earth revolves round the sun.

To understand the extent of Hunter's investigations in geology, it is necessary to call to mind the state of the science in his time. Previously, the principal object of geologists—such as Hooke, Woodward, Burnet, Whiston, Buffon, and Werner—had been to theorise on the mode in which the globe originated, and to point out the operation of the causes which were conjectured to have been employed by the Author of Nature in the creation. Hutton, on the other hand (1788), first aimed at explaining the former changes of the earth's crust by a reference exclusively to the same agencies as are at present at work in nature. This is the system under which the most rapid advances in geology have been made; and it is this system which Hunter—apparently independently—adopted. But Hunter went further than Hutton in the importance which he attached to the evidence of fossil organic remains as evidences of the origin and age of strata.

The perusal of the deductions which Hunter derived from his palæontological studies, as given by Professor Owen, is very interesting; we can here only indicate them briefly.

His writings show that he recognised the proper aim of geological investigation, the right way of investigating, and the true extent of the field of investigation. He also enunciated the important principle of the coevality of the fossils with the mineral strata in which they are found, more definitely than it had been laid down by any of his predecessors. In reference to the opinion prevalent in his time, that granite was the formation prior to animal or vegetable, Hunter saw no reason for the difference supposed to exist—*i. e.*, that the granite was absolutely and necessarily first in time of formation; and this idea has been confirmed by the subsequent observation that some granites are not different in point of time from fossiliferous strata. He believed that the sea must at some period have overflowed the dry land, and that there must have been alternations of sea and land—a deduction in which he was anticipated by Steno; and he opined that, to account for the depth of some of the strata, the sea must have been "a vast time" in those places. He in one point diverged from his determination to explain past phenomena by the action of existing natural causes, and, in deducing a theory of alteration of climate from the supposed identification of some of his fossils with recent animals, he referred the circumstance to a "change in the ecliptic". On the question of the extinction of species, he thus cautiously expressed himself:—

> "There are very few fossils that can be matched with the recent, or [else] that the recent are not known now to exist; yet, though very few fossils correspond with the recent, though very similar [to them], yet they may not be of different species, but varieties; for there is no more reason [meaning there is as much reason] for an animal in the sea varying from its original, from a difference in soil [sea-bottom] and other circumstances, than [as] there is for those upon land, which we see they do; but if they are really different species, then we must suppose the old are lost, therefore a new creation must have taken place. But that many are actually lost is, I think, plainly shewn by the remains of land animals that are not now known. Yet how they became extinct is not easily accounted for." (P. 311.)

The principles which Hunter recognised as having been operative in producing the present geological conditions of the earth are thus summed up by Professor Owen:—

> "First, he exemplifies the effect of running water, as in valleys and river-courses; secondly, the deposition of the matters so transported to the sea, noting the different distances to which such transported matters would be spread over the sea-bottom according to their size and other physical characters; thirdly, the erosive action of the sea on coasts, as moved by tides, currents, or winds; fourthly, the power and mode of operation of a retiring sea on a rising land; fifthly, igneous expansive force and volcanic eruptions; and sixthly, deposit through animal or organic agency." (P. 333.)

We must now leave these Observations on Geology, and name merely the Observations on Phytology and the outline Treatise on Anatomy as forming the remaining part of the first volume. Of the second volume we shall not attempt to give an analysis. It consists of a series of Observations on Comparative Anatomy, which the learned editor has arranged in due order, commencing with the highest vertebra next to man. Whatever we have to say of it will be included in our concluding remarks; and to these we must now hasten.

Having now brought to an end our attempt to give a sketch of the contents of these volumes, we will repeat, only more positively than before, what was said in an early page of this notice—that "if our admiration for the energetic intellect of Hunter can be increased, it must be increased by the study of the volumes of his writings which have been lately put forth". These posthumous works of Hunter are truly tests by which his fame can bear to be judged. In them are manifest the strongest indications of that turn of mind which more than any other helps on the advance of science; that is to say, not a mind given to rapid generalisation and hypothesis, but an observant mind, combined happily with untiring industry, and with a honest purpose of employing both intellectual and industrial power for the good of science in the present and in the future. In certain points at least, a comparison bears institution between Hunter and the ancient father of medicine—Hippocrates. Each, living in an atmosphere of scientific speculation, was but slightly influenced thereby, but struck out into the safe path of empirical observation: the extent of the field of nature over which they ranged varied, but the path they followed was one and the same. And, as it is in his empirical observations that the fame of Hippocrates has its lasting foundation, so it is on the monuments of industrious intellect which Hunter has left that his renown will stand most firmly.

Of the style of these works we have as yet said nothing. The author's language can be called by no other name than *Hunterian.* It cannot always be called plain and simple, because it is often more or less obscure; so much so, that some of the ideas are given in two or three different forms, in which the author had endeavoured to make them intelligible; and in many parts the editor of the work has found it necessary to interpolate words or phrases to make up the meaning of the sentence. To say that the style is unpolished, is not to underrate the work; indeed, if we may again make a comparison, we would say that these volumes of Hunter's observations have reminded us of the Cyclopean monuments of the prehistoric ages—works of tremendous industry, contrasting in their unpolished simplicity with the elaborate Grecian columns of a later period, but in their massive roughness possessing an element of durability, and by their simplicity causing posterity to admire them for what they are, not for the ornamentation surrounding them. In like manner, we feel convinced, the labours of John Hunter will stand forth through a long period of years, admired for their simple grandeur, and exciting feelings of veneration for the intellect which designed them, and for the industry which accomplished them.

A Tract on Neurolytic and Aguish Disorder, and on Malarioid Remittent Fever. By C. Handfield Jones, M.B.Cantab., F.R.S., Physician to St. Mary's Hospital. London: 1859.

In this pamphlet, Dr. H. Jones has collected together a number of cases to illustrate peculiar morbid phenomena of the nervous system, which have of late years especially presented themselves to his notice.

> "I have wished," he writes, "to call attention to a morbid state, which, though palpable enough, seems to me insufficiently described by the common title of debility. It exists sometimes as a purely general condition, but much more often some one symptom is so prominent as to arrest the attention, and give a name to the disorder. The points which I lay stress on as distinctive of this state are, the absence of any serious organic disease or drain on the system, the presence of great nervous prostration, out of all proportion to any discoverable disorder, the sudden occurrence in some cases of phenomena, such as are not met with in the regular course of recognised disorders, and the almost indefinite prolongation of the ailment, unless arrested by appropriate treatment."

To this condition, Dr. Jones gives the name of neurolysis.

A little consideration will show us the importance of the subject so practically handled by Dr. H. Jones. When called to any case presenting cerebral symptoms, there is no question of such importance as that which we have to put to ourselves, how far there is reason to believe that organic mischief exists or not. If the paralysis, the giddiness, the impaired speech, the numbness, or neuralgic pain, are the results of a clot of a tumour, or of softening, we know pretty well that there is not much to be hoped for from treatment. But if we can see at least a probability that none of these irremediable conditions exist, we feel we have scope for action. Now, it does appear to us that the profession generally are very far from realising the possibility of grave cerebral or spinal symptoms being the result of mere functional disorder of the nervous centres. It is true that the conception of reflex paraplegia is a good step in this direction; but the cases recorded in the pamphlet before us are materially different, in that the symptoms do not appear to have resulted from any peripheral irritation, but from some morbid influence telling directly on the nervous centre. Cases 1, 2, 3, 4, 17, 18, are examples worth referring to. Several of the other cases illustrate the action of aguish and influenzal poisons in producing marked nerve-disorder. This is especially true of some of the cases occurring in children termed malarioid remittent. The symptoms in some of these closely simulate meningitis, and the distinction may be a matter of great nicety.

Shortly, the point of the tract is to insist on the frequent failure of nervous power in nerves or in centres, and the generation of phenomena apparently identical with those produced by actual organic mischief.

This pamphlet of Dr. Handfield Jones demands the careful consideration of the practitioners of our art. It is written with his clear and philosophic pen; and treats of a subject which has most assuredly not hitherto met with the attention its importance demands.

Operative Surgery, adapted to the Living and Dead Subject. By C. F. Maunder, F.R.C.S., Assistant-Surgeon to the London Hospital. Part ii. London: 1861.

This, the second part of Mr. Maunder's work, contains an account of the methods of performing amputations and certain special surgical operations.

Chapter i tells us generally what Amputation is—its varieties and modifications.

In Chapter ii, we find a description of the Amputations of the Lower Extremity; and in Chapter iii, of those of the Upper Extremity.

Chapter iv details the Special Operations of Surgery.

The volume contains ninety-three figures, illustrating the various operations described in the text. It will be found of much service to the student of surgery, containing a very large amount of information in a compact space and in a handy form.

British Medical Journal.

SATURDAY, JUNE 1st, 1861.

THE LANCET AND THE LUNATIC.

We regret that we have once again to refer to the case of the unfortunate Mr. Steuart; but we feel that we should be failing in our duty to the profession as journalists, having an honourable charge committed to our care, if we did not, in the name of morality and truth, protest against the defence set up for Dr. Winslow by the *Lancet* in reference to this case.

Why we take upon ourselves the unpleasant task, may be explained as follows. The *Lancet* has long been, according to its programme, at the head of medical literary civilisation—the *facile princeps* in furthering all that high dignity, honour, and welfare, etc., of which we hear so much when matters ethico-medical are under its discussion. Moreover, it has the eye, and the ear, and the mouth, and the bowels of the public under its especial protection. It teaches the public what to eat, drink, and think, in matters medical and matters culinary; and what to avoid. It addresses itself strongly, we may say, to the unscientific outsiders, as well as to the scientific insiders of the profession. The public, we will suggest, take their estimate of medicine and medical men (in so far as the medical press is a means for estimation) from the *Lancet;* and we need not stop to say at what a very high estimate said public generally do take both doctors and their physic.

What, therefore, the *Lancet* tells the people is a matter of interest to us all; and we are in duty bound to enter a protest against its tale, if it lay down propositions which are contrary to propriety and fair dealing. We consequently feel ourselves called upon to protest against the interpretation of the law of lunacy, as laid down by the *Lancet* of May 18th, in the case of the unfortunate Mr. Steuart.

A lunatic, says the *Lancet*, is not a lunatic. This is the first proposition made by the *Lancet*, to which we cannot give assent, and which we consider a mistake. The *Lancet* proves its assertion thus:—

> "Mr. Steuart's mind at this time showed none of the ordinary symptoms of insanity. He had no delusions or hallucinations, neither was there any reason for supposing that his intellect was in the slightest degree impaired. *His condition was that of great nervous dread, having a morbid fear of the possibility of doing mischief to one of his family.*"

Hence, for the occasion, the *Lancet* affirms: that a man who has the *morbid* idea firmly impressed on his mind that he may murder his wife or child, if he be not put under restraint, *has an intellect in no way impaired!* Now, what we have to say to this statement of the *Lancet* is, that if it were written for the profession's instruction, it smacks very like an insult; and, if it were written for the public, very like something worse than a joke.

Another serious fact is involved in the *Lancet's* assertion. What is to be said of the two physicians who consigned this gentleman, by their certificates, to an asylum? The *Lancet* flatly accuses them, by implication, of perjury. And what is to be said of Dr. Winslow? "Dr. Winslow", says the *Lancet*, "soon detected that Mr. Steuart was not insane." And yet, having made this discovery, he keeps him, a certified lunatic, under his care in an asylum! Oh! what a revelation for Lord Shaftesbury and Co.!

Now, we should seriously wish to ask the writer of these lines in the *Lancet:* Does he really believe that the morality and the common sense of the profession are dead? or does he trust to the belief that the public only read his words? Really it is past comprehension that any medical journal could have arrived at such a mental condition as to boldly assert that a man who has a *morbid* itching for cutting his own or other people's throats is not a lunatic. Why, is not the very fact of a man's voluntarily seeking restraint from the impulse of his own actions—the fact of his entering an asylum—proof enough of his insane state?

We have no wish to throw blame on the managers of the lunatic asylum in which Mr. Steuart took refuge; but it is not our fault if Dr. Winslow have such indiscreet friends. And we must assert, the *Lancet* notwithstanding—and we are satisfied the profession will go with us—that so long as a certified lunatic is under the charge of the manager of a lunatic asylum, that manager is bound to be responsible for his patient. There is no escape from this position. Law and common sense are outraged by the opposite assertion.

Again, the *Lancet,* still making apology for Dr.

Winslow, states that he strongly urged Mr. Steuart not to go to the House of Commons; that he even suggested the possibility of an attack of paralysis or epilepsy as the result of his going there. Well! if an attack of these kinds, why not an attack of that other kind—that *morbid* desire (not an insane one, says the *Lancet!*) of killing? And if a murder under such circumstances had resulted—if a Premier had been struck down—where is the man, except the writer in the *Lancet*, who would have the courage to say to the world, "Oh! this man is not insane; he is responsible for his actions"?

We will not accept the assertion "that Dr. Forbes Winslow was exonerated from all blame in the matter"; and if we say this, Dr. Winslow must remember that we are driven to it by the pleading in his defence by the *Lancet*. No one, says the *Lancet*, is to blame in the matter. The lunacy laws must take all the blame, because "they forbid a physician to receive into his asylum a patient afflicted with nervous symptoms, even if quite distinct from insanity, unless he be certified to be insane". But, in this case, it is a fact, that Mr. Steuart was admitted into Dr. Winslow's asylum *formally*, under the certificates of two physicians. *This* the *Lancet* tells us, and yet has the courage to write the above lines, and apply them to the case of Mr. Steuart! *Quousque tandem?* Two physicians, if the *Lancet* be true, have been found who have dared, out of mere complaisance, to certify that a man who was not insane was a proper subject for committal to a lunatic asylum; and Dr. F. Winslow has had the courage to receive this sane man into his asylum, and to report him as an insane man to the Commissioners of Lunacy—all out of mere complaisance! Three physicians have been bold enough to face the penalties of the law, to infringe the liberty of the British subject, to write and act an untruth, out of complaisance! Yes, this is what the *Lancet* would palm upon a discerning British public!

The clearest acts of insanity, it is said, do not indicate insanity. A lunatic—a resident, under formal certificates of lunacy, in an asylum, is not under the responsible control of the gentleman in whose asylum he resides! Two physicians can be got for their pay to certify that a sane man is a lunatic, and the owner of a lunatic asylum to take the sane man into his asylum! Why this audacious perversion of facts—this insult to morality and common sense—has been unblushingly thrown into the eyes of the public, it is for the *Lancet* to explain, and not for us further to interpret. We simply enter our protest to such statements as representing the opinions of the profession to which we have the honour to belong. We now leave the matter to the consideration of the Commissioners of Lunacy, and to those physicians who are told by the *Lancet* that they committed a sane man to a lunatic asylum.

THE WEEK.

We have to refer our readers to a case of death following hard upon the taking of a Turkish Bath, with the following particulars of which we have been favoured by Mr. T. W. Winter of Bristol.

"The facts of the case referred to by me in the *Western Daily Press* are these:—

J. G., aged 32, was a somewhat delicate man, but of late years was in good health. Medical examination discovered no organic disease; nothing in fact but the acute disease of which he died. When he entered the bath, he was as well as usual, with the exception of a slight cold. He had returned a day or two previously from a tour of pleasure in Cornwall, and was congratulated by his friends on his good looks. I took a walk with him in Clifton, a few days before he took the bath, and thought he looked remarkably well; indeed, better than usual. I do not know how long he was in the bath, or what was the temperature. His own impression was, that the cold douche had acted very injuriously upon him. On reaching home after the bath, he slept on the sofa for a short time, and the sleep relieved the severe headache which the bath had occasioned.

"On waking, he talked a little incoherently, he also complained of pain in the chest and abdomen, but chiefly in the epigastrium. On the evening of the same day he was first seen, and at that time his breath was very short, and there was acute pain on inspiration. From that time (Friday night) he became steadily worse, until Tuesday afternoon when he died. His symptoms when first examined by me were these:—Breath very short; acute pain in the epigastrium, occasionally extending to different parts of the chest and abdomen. Pulse 120—feeble and small. Tongue coated in middle. Skin dry.

"On the following Sunday, the pulse was almost imperceptible at the wrist; the extremities were cold and clammy. He had no sleep since the attack, and was inclined to be a little incoherent occasionally. Vesicular murmur was heard all over the chest; rubbing sound over the inferior lobe of the right lung posteriorly. The heart-sounds were feeble, but otherwise normal. From this time he rapidly sank until death.

At *post mortem* examination, forty-eight hours after death, the body was spare and thin. Rigor mortis was existent. The cavities of the chest and abdomen being opened, the costal and pulmonary pleuræ were found to be adherent over very nearly the whole extent, with a layer of plastic lymph (about a line in thickness) between them. This was of very recent deposit, being soft and easily torn. A few ounces of fluid were found, chiefly in the right pleura. The lungs were adherent to the diaphragm by the same plastic exudation. The pericardium, both cardiac and reflected, was covered with a similar layer of lymph, but no adhesion had taken place between them. The mitral valve was healthy; the aortic was congested, but there was no deposit upon either. The omentum and peritoneum covering small intestines were very much congested—but no exudation. The lungs were quite healthy. I have given you the facts. I think it best to give them thus simply, leaving it to others to found upon them what inferences they may think proper."

This case illustrates strongly the position we have all along assumed in reference to this Bath, viz.: That, violent agent for good or for evil as it is, its general use has been too recklessly and indiscriminately recommended to the public by members of our profession. We are well aware that one swallow does not make a summer; and are not, therefore, going to draw any sweeping conclusions against the bath from an isolated case. We will, however, defy any impartial person to read the details of this case, so well and tersely given by our correspondent, without coming to the conclusion, that the Turkish Bath was a powerful promoting agency in the death of this gentleman. We are, therefore, justified in using it as a warning—stronger than any argumentative appeal to the multitude could be—against the reckless indulgence in the bath so common at this moment, thanks to the unreasonable praises of it expressed by members of our profession. We, only the other day, had to record a death from bursting of an aneurism, consequent on this bath-taking. And we believe there is not any one in practice, who cannot tell of minor evils and sufferings which have come under their notice, as consequences of this stupid indulgence—for the mere sake of indulgence—in the oriental luxury. We sincerely trust that this case may act as a damper to the enthusiastic and ill-judged eulogiums which the Turkish Bath has suffered at the hands of its medical admirers; and that the public may pause and look twice at the matter before they rush head foremost into it without rhyme or reason. We shall expect soon to hear that the general eating of arsenic has been recommended by the faculty on the strength of the assertions of the Styrian people—that it makes them strong, long-winded, and sleek.

We, some weeks since, referred to the changes in its laws, relative to the election of the medical officers, which the governors of St. Mary's Hospital were about to make. After long discussion, and after taking into the fullest consideration the interests and wishes of those most nearly concerned in the matter, it has been decided, that no physician or surgeon shall hold office as senior medical officer of St. Mary's Hospital for a longer period than twenty years, or after the age of sixty-five; and that all the medical officers shall be subjected to the furnace of quinquennial elections. We have, on a previous occasion, so fully given our opinions on this question, that we need not now repeat the reasons which induce us to give our cordial assent to these conclusions. We believe them, in some sense, to be of national importance; for we cannot doubt that the example set by St. Mary's Hospital will be, sooner or later, followed by other hospitals. The governors of hospitals cannot much longer consent to be party to the scandals, which so continually, and of necessity, adhere to unlimited tenure of office by hospital physicians and surgeons. The more the merits of the conclusions adopted by St. Mary's Hospital are discussed the more will they recommend themselves to the attention of the profession and the public.

The following "refusal to pay" on the part of the War-office is worthy the attention of the profession. It is clear, from the War-office note, that any medical man who attends a sick soldier on furlough will do it at his own risk, and, we need hardly add, most probably, at his own cost:—

> "War-office, Pall Mall, S.W., 13th May, 1861.
>
> "Sir,—I am directed by the Secretary of State for War to return the enclosed claim for medical attendance on Private George Paithe, and to acquaint you that, as the expense was incurred while the man was absent on ordinary furlough, the same is not chargeable against the public, as stated, in print, on the marginal note of the Form 297, on which the claim was preferred.
>
> "I have, etc.,
> (Signed) "W. Browne."

M. De Lignerolles asks why the French Academy, in discussing the question of *post mortem* Cæsarean operation, makes no allusion to *ante mortem* Cæsarean operation. He answers the question by saying, because it is generally accepted as a fact, that the operation never succeeds in Paris; but, he adds, this is an error. From the time of Gaspard Bauhin, seventy successful cases have occurred in the Hôtel Dieu, and others elsewhere, in Paris. He then offers this advice to those who would operate successfully: "In uniting the lips of the wound, bring cut edges of the peritoneum into immediate contact, dress, etc., the wound, and attend the patient yourself, and visit her frequently." Our English ovariotomists will not find any novelty in this recommendation.—A correspondent of the *Constitutionnel* writes from Naples:—"An official document, which I have been allowed to see, shows that typhus has carried off, in the space of three months, two-thirds of the doctors, attendants, etc., of the hospitals of Naples and its environs."—Typhus, says the *Medicinische Wochenschrift*, is raging in Vienna; all the hospitals are filled with patients; and if it does not soon diminish, the authorities must open some other establishments for their reception.—A writer in the *American Med. Times* relates, as a warning to his brethren in medicine, a case of "profuse salivation from application of mercurial ointment to the face in confluent small-pox."—"Just now," says the *Globe*, "we have news from Geneva, that the devil in person has got possession of several villages on the Savoy side of the lake at and around Thorion, the possessed demoniacs being urged by uncontrollable impulse to climb trees. This epidemic rages almost exclusively among the gentler sex; and the Bishop of Annency, with a staff of grand vicars, has been exorcising the fair enthusiasts ineffectually. The French government has despatched the Physician Constant with a staff of mad doctors, to try their skill on the patients. The devil ought by right to have selected Gibbon's, Rousseau's, Byron's, and the Chillon prisoner's side of Lake Leman; but characteristic perversity regulates every act of Beelzebub."—Liebig has been elected Foreign Associate of French Academy of Sciences; Wohler, Airy, and Agassiz, were his competitors.—One of the Professors of Brussels University has found a new way to settle a difficult point of diagnosis. The opinions of the students were so much divided on a case, that the Professor suggested a bet of a dinner to be paid by the losers to the gainers. The bet was accepted; and a grand banquet in consequence came off on the 4th May This is what we should call *waking* the patient with a vengeance.—Erasmus noted the relationship which existed between the gravel and the gout. He wrote to a friend:—"I have the gravel, and you have the gout; we have married the two sisters."—Dr. Domenico Ivaldi, who is desirous of establishing a medical association in Italy, has offered a gold medal to the author of the best essay on the subject.—Dr. Gallavardin is anxious to have established hospitals demi-allopathic and demi-homœopathic. M. P. Diday offers him, in the meantime, a chance of trying his hand at curing gonorrhœa by homœopathic doses. "Thanks," he writes, "to my impartial colleague, M. Rollet, I am able to offer you every facility for the performance of the trial in the Hôpital Antiquaille. Our judge shall be the medical world.—The *Journal de Méd. et de Chirurg.* relates a case of inversion of the uterus, whose reduction was attempted by M. Nélaton and M. Depaul; and with such violence, that the uterus was ruptured, peritonitis and death being the consequence.

Association Intelligence.

LIST OF SUBSCRIPTIONS FOR 1861.

The first List of Subscriptions paid for the present year will be published this month. It is therefore particularly requested that the Treasurer may at once receive all moneys in hand, as after this date it becomes the duty of the General Secretary to apply to every member whose subscription has not been received.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 1st, 1861.

NOMINATION OF PRESIDENT-ELECT FOR 1862-63.

A Special General Meeting of the Metropolitan Counties Branch, and of all other Members of the Association residing in the Metropolitan District, will be held at 37, Soho Square, on Tuesday, June 4th, at 4 P.M. precisely, for the purpose of selecting a Member to be recommended to the ensuing General Meeting of the Association at Canterbury, to fill the office of President of the Association in 1862, in which year it is expected that the General Meeting will be held in London.

By order of the Council of the Metropolitan Counties Branch.

A. P. Stewart, M.D.
Alexander Henry, M.D. } *Honorary Secretaries.*

London, May 25th, 1861.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metropol. Counties. [Special General.]	37, Soho Square.	Tuesday, June 4th, 4 P.M.
South-Western. [Annual.]	Rooms of the Royal Institution of Cornwall, Truro.	Wednesday, June 5th, 3 P.M.
North Wales. [Annual.]	Wynnstay Arms Hotel, Wrexham.	Tuesday, June 18th, 11 A.M.
East Anglian.	Norfolk and Norwich Hospital.	Friday, June 28th, 2 P.M.

LANCASHIRE AND CHESHIRE BRANCH.

The Twenty-fifth Annual Meeting of this Branch will be held at the Medical Institution, Mount Pleasant, Liverpool, on Wednesday, June 5, under the presidency of Edward Batty, Esq.

Gentlemen who intend to read papers, are requested to send notice to the Honorary Secretary as early as possible.

A. T. H. Waters, M.R.C.P., *Hon. Sec.*

Liverpool, May 1st, 1861.

EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

The Fifth Annual Meeting of this Branch was held at the Hull Infirmary on May 22nd, at 1. 30 P.M., Sir H. Cooper, M.D., President, in the chair. Fifteen members and three visitors were present.

The chair was first taken by W. Eddie, Esq., of Barton, the President for the past year, who spoke of the high honour which the members of the Branch had conferred upon him by electing him their President; and, although the office might have been sustained in a more efficient manner by other members, yet he felt proud to acknowledge the satisfaction expressed by those around him that those duties had been discharged to the best of his ability. On retiring from the office of President, he felt that the duties would be more worthily discharged by Sir H. Cooper, whose ability to sustain the office was so well known to all; nevertheless, the welfare and success of the British Medical Association had ever his best wishes, and at all times should his best energies be devoted to advance the interests of so important a body of medical practitioners. Mr. Eddie then made some very pertinent remarks relative to the number of licencing bodies in medicine and surgery which must be anything but satisfactory to the profession at large. By the late reading of the charter of the College of Physicians, the powers of which had lain so long dormant, a new grade of licentiates had been created, which would have a tendency to militate against the interests of the Apothecaries' Company as a licensing body. He spoke in high terms of the Apothecaries' Company as the only body who had really raised the status of the general practitioner in this country; and that, as we could have no faith in acts of parliament, he thought so many conflicting interests of the present organised bodies for licensing practitioners in medicine and surgery were detrimental to the advancement of our profession.

Mr. Eddie then vacated the chair, which was taken by Sir Henry Cooper, M.D.

Sir H. Cooper made some complimentary allusions as to the efficiency of the late President and to the very satisfactory manner in which the office had been sustained by him during his presidential year, which was cordially reciprocated by the members present. The President also referred to his long connexion with the Association from its commencement, the deep interest he felt for its prosperity; and that nothing should be wanting on his part to sustain unsullied the honour of his often much abused profession, and merit the confidence of so many cherished friends and colleagues who had placed him in the enviable position of President of the East York and North Lincoln Branch.

Officers for 1861-2. The Officers appointed for the ensuing year are as follows:—*President*, Sir H. Cooper, M.D.; *President-elect*, R. Hardy, Esq., (Hull); *Representative in the General Council*, W. J. Lunn, M.D., (Hull); *Honorary Secretary*, H. Munroe, M.D., F.L.S., (Hull); *Committee*, J. P. Bell, M.D.; R. M. Craven, Esq.; O. Daly, M.D.; J. Dix, Esq.; J. A. Locking, Esq.; H. Sandwith, M.D., (all of Hull); W. Eddie, Esq., (Barton).

Next General Meeting. It was decided that the next general meeting should be held at Grimsby in Lincolnshire.

Papers. The following papers and communications were made:—

1. Remarks on Hospital Statistics. By Sir H. Cooper, M.D.
2. A case of Division of the Tendo Achillis, with Wound of the Posterior Tibial Artery. By Thomas Sandwith, M.D.
3. Some Remarks on Acupressure. By I. Dix, Esq.
4. Cases of Hydatids, with Specimens. By T. B. Keetley, Esq.
5. On the Reparation of certain Deformities. By K. King, M.D.
6. A case of Morbus Addisonii, or Bronze Skin Disease, was exhibited. By O. Daly, M.D.
7. On Excision of the Knee Joint. By R. Craven, Esq.

Mr. Keetley's cases were illustrated with several beautiful preparations of Hydatids, which were afterwards presented by him to the Hospital Museum.

One great advantage obtained from holding the Branch Meetings in the Infirmary was that Dr. King, Dr. Daly, and Mr. Craven were enabled to present for inspection before the members the patients themselves, living illustrations of the cases brought forward by them.

Most of the papers will be forwarded for insertion in future numbers of the Journal.

Dinner. About twenty members and their friends dined together at Glover's Hotel. Sir H. Cooper presided, and Mr. Eddie, Barton, occupied the Vice-chair. After the usual loyal and professional toasts had been given, the toast of "*Success to the* Journal" was received with general satisfaction. The remarks made by Dr. King who proposed, and Dr. Munroe who responded to the toast, as to the great improvement of the Journal in every department, which was now one of which the Association ought really to be proud, were received with universal approbation. It was suggested by several members that far too short a time was allowed at the meeting for the full discussion of so many very interesting and valuable communications; and that the Committee should take the subject under their early consideration, so that in future this grievance might be remedied. Several suggestions were also made as to increasing the number of Members of the Association, and that if the Association could number five thousand members during this year we should be in a position to circulate a journal that could have no rival, and be able to carry out other objects of importance to medicine and the profession.

Special Correspondence.

LIVERPOOL.

[from our own correspondent.]

[*Concluded from page* 562.]

There are three general dispensaries. The *North* and *South Dispensaries* are branches of one establishment, and offer great scope for practical observation, with occasional opportunities of cultivating operative surgery, especially in what may be called the *impromptu* operations, such as hernia.

The *St. Anne Dispensary* is a distinct and more recently established institution, with which is connected an eye and ear department.

We have also an *Eye and Ear Infirmary*, containing twenty-four beds, where about 200 of the principal and 400 of the minor ophthalmic operations are performed in the course of the year.

The *Infirmary for Children* has existed for several years as a dispensary, but has only recently been opened for the reception of in-patients. It is at present located in what was a large schoolhouse, and contains seventeen beds. The internal arrangements and management are excellent; and altogether this is a most interesting and promising institution. Great pains are taken to render the condition of the little patients as happy and comfortable as their various ailments will permit: an abundant supply of toys, books, and pictures is provided to amuse and divert the minds of the children, which, while it forms a pleasing feature in the wards of an hospital, is doubtless an important auxiliary to the medical and surgical treatment.

Hip-disease, in its various stages, is very frequently seen amongst the surgical cases: another numerous class of applicants consists of children with "knock knee." The treatment adopted for this deformity is the application of a straight splint on each side of the limb, which, in the majority of cases, restores the limb to its proper form in a few weeks.

An excellent rule exists in the outdoor department of this institution. Each applicant for medical relief has to pay a deposit of sixpence, which is returned when the patient is discharged cured or otherwise. Some grateful parents, on their children's recovery, refuse to receive back the money, which then goes towards the funds of the hospital; but in almost every instance the child is brought regularly to the consulting-room until discharged by the medical attendant, who by this means retains the patient under his observation as long as he deems necessary, and has the great advantage of being able to record with accuracy the results of his treatment.

There are two obstetric institutions in Liverpool, namely, the *Lying-in Hospital*, including a dispensary for women and children, established in 1841, containing sixteen beds; and *The Ladies Charity*, founded in 1796, which provides assistance to poor married lying-in women at their own homes. This latter has connected with it the Vaccine Institution, lately recognised as one of the stations of the National Vaccine Establishment for the supply of lymph for the public service, and for giving instruction and granting certificates of proficiency in vaccination, under the regulations recently issued by the Privy Council. As some misapprehension appears to exist as to the instruction and effect of these proceedings of the Council, I propose in a future letter to enter more fully into the subject, and at the same time to give a report upon vaccination as conducted at this institution.

In addition to these charitable institutions, there is an extensive medical department connected with our gigantic *workhouse*, with its population of nearly 3,000. There is a *Fever and Small-Pox Hospital*, erected by the select vestry in 1802, at the suggestion of Dr. Currie of *Medical Reports* celebrity; the medical and surgical wards; a female lock; a sick nursery; a lying-in department; lunatic and epileptic wards; the whole comprising a sick population of more than 500, which, together with abundant opportunities of pursuing pathological investigations in the deadhouse, affords a field of medical observation not to be surpassed, if equalled, in any similar institution in the kingdom.

The Liverpool Medical Institution is a handsome and commodious building, with a somewhat imposing aspect, containing an excellent theatre capable of holding 300 persons; a museum, committee and other rooms; and a spacious library, furnished with about 6,000 volumes, and well supplied with the current medical literature of the day. The members number about 110, and hold ordinary meetings every alternate Thursday during the winter session, for the purpose of reading papers and exhibiting pathological specimens. These meetings are not numerously attended, but are, nevertheless, conducted with spirit, and prove attractive to those who take an interest in their profession as a scientific pursuit.

The Council of the Institution have always liberally and courteously placed their rooms at the disposal of our Association on the occasion of its meetings in Liverpool. I presume, therefore, that next month the members of the Lancashire and Cheshire Branch will assemble within its walls, when I hope we shall see a goodly muster.

At a grand review of our *Volunteers*, which took place lately, the medical staff was well represented by a numerous body of mounted cocked hats, showing that the medical men of Liverpool are not wanting either in patriotism or in military ardour. There is, however, one circumstance to be regretted in connexion with this movement as it affects the profession, namely, that in a few instances surgeons of brigade, in the fulness of their devotion to their country's cause, have quite overlooked their plain duty as members of the medical profession, by consenting to serve in company with certain homœo-quacks, who with their characteristic eagerness to seize every chance of clinging to the skirts of legitimate medicine, have contrived to get themselves appointed surgeons to volunteer corps. It is only fair, however, to say, that these are exceptional cases, and that, in other instances, a determined and successful stand has been made against this attempted official recognition of quacking.

I cannot more appropriately bring this my first communication to a close, than by recording the numerous expressions of satisfaction which the improved character of our Journal has called forth from the Associates in Liverpool. I would take this opportunity of reminding them, that a more tangible method of evincing their approbation would consist in obtaining from amongst their medical acquaintances recruits to strengthen the muster-roll of our Association.

[Erratum. The Royal Infirmary, Liverpool, was founded, we are informed, about the year 1749; and not in 1789, as stated in our Special Correspondent's letter of last week.]

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, May 6th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

ON THE DISEASES OF HONG KONG AND THE CANTON RIVER STATION. BY W. R. E. SMART, M.D.

[*Read by* Dr. M'William.]

Dr. Smart, after observing that, in the first division of his paper (read at the meeting in April), he had endeavoured to show what in the climate seemed to bear relation to the diseases and their causation, proceeded to discuss the diseases as classified and specified in the nosological table appended to the paper, which was, in fact, an abstract of the admission-book of the Royal Naval Hospital, Hong Kong, extending from 1858 retrospectively to 1846.

Climatic Diseases. The total numbers contained 11 per cent. of fevers, 31 per cent. of diseases of the intestinal canal, 2.3 per cent. of diseases of the liver and spleen, and 1.3 per cent. of undefined diseases, termed debility or cachexy. This group presented the following ratios of cures, invalidings, and deaths.

	Adm.	Cured.	Invalided.	Dead.	Rem.
Fever	621	517	65	37	2
Intestinal Diseases	1471	853	363	245	10
Liver-Diseases	107	61	26	20	0
Cachexies	59	36	22	1	0
Total	2258	1467	476	303	12

The mortality was thus more than one-eighth of the number treated, and the invalids were one-fourth of the remainder, unfit for further service on the station. That climate and the varying seasons have great influence on the production and in the aggravation of this group of diseases, was evident from the following return.

Period.	Adm.	Cured.	Invld.	Dead.	Rem.
Quarter ending March	387	235	82	70	
„ „ June	458	304	97	45	12
„ „ Sept.	664	474	114	76	
„ „ Dec.	746	454	183	112	
Total	2258	1467	476	303	12

The healthy season is the spring, when the soil is thoroughly dry, previously to the commencement of the rains; and the unhealthy season coincides with the period when the plains are undergoing artificial drainage for the rice-harvest, or when the whole surface is drying by spontaneous evaporation, with no rainfall. The better or less unhealthy season embraces the period from February to May inclusive, and the isolated month of September. The more unhealthy seasons are from June to August inclusive, and again from October to January.

In the tables, the mortality of the entire class of fevers was shown to be as low as 5.04 per cent.; while that of what has been defined the "better season" was as high as 10.7 per cent., and that of the "worse" season was only 4.05 per cent.

The seemingly paradoxical conclusion arises from the fever-attacks of the summer being more numerous, and at the same time more the result of ordinary causes, from which circumstance they are more amenable to treatment than the fever attacks of the "better season", which are less numerous, but relatively more frequently of the severe remittent type—the result of special exposure; so that an equal amount of mortality falls in a much smaller number of admissions.

Variola. The Chinese inoculate for small-pox in the spring, so that the disease becomes epidemic among them at that season. Of fifteen cases in the Naval Hospital, seven came under Dr. Smart's care in the spring of 1859; and of these, four presented unquestionable marks of vaccination, two had not been vaccinated, and in one case vaccination was doubtful. The only fatal case was one of those unvaccinated. While three cases were in hospital at Hong Kong, the disease prevailed among our marine batallions at Canton, and also among the crews of ships at Whampoa, in the Canton River. In the propagation of cow-pox from imported virus, Dr. Smart found it uncertain in operation.

Diseases of the Abdominal Viscera were most intense in the months of falling temperature, with a drying soil —from October to January inclusive; and again in the hot moist weather, from June to August. It may seem strange that in the most densely populated country of Asia, with an immense river population, Asiatic cholera is not of more frequent occurrence in an epidemic form. In the thirteen years through which Dr. Smart's investigations extended, there was but one cholera season; and that was in the summer of 1858, at Hong Kong, when the cases, whether ashore or afloat, were fatal in large proportion.

Enteritis occurred most frequently in the latter half of the year; while gastritis was most common during the first half. Peritonitis seemed also to be a disease of the earlier months; and it was remarkable that pleuritis—the inflammation of another serous sac—was most frequent in the same months as peritonitis.

Liver-Diseases followed much the same order of occurrence as dysentery; but the inflammatory diseases of the liver seemed to be more prevalent earlier in the season, preceding, as it were, the bowel-disorder.

The ratios of mortality and invaliding in liver-diseases was found to be almost equal to those of dysentery. Thus, the mortality were 20.4 and 20.8 per cent., and the invalidings 26.5 and 25.47 per cent. respectively, in the two diseases.

Inflammations of the Spleen were either more rare or more difficult of diagnosis, nine cases only being recorded; of these, none died, but five were invalided.

The distribution of fever-cases into the continued, remittent, and intermittent classes, would at first sight appear to be a very simple and easily decided matter. In clinical practice, however, it is not so; and errors on this point are very frequently committed, especially in localities where the recognised causes of malaria are evident, and where all diseases, whether of the febrile or inflammatory organic nature, assume the periodic form as soon as the adynamic state of the vital powers supervenes.

Dr. Smart was disposed to consider that, in the majority of fever-attacks in Hong Kong, it may be discovered that simple exposure to the sun's heat, disregard of sanitary precautions, either voluntary or enforced, indulgence in habits that derange the digestive functions or depress the nervous forces, have immediately preceded the invasion of fever, standing in the relation of exciting cause, here, as in every other country. These cases are amenable to the general principles of treatment in common continued fevers, whether of the ephemeral, congestive, synochal, or typhoid types; and they must not be brought to swell the charge of insalubrity of climate.

When the zymotic causes predominate, as in the summer and autumnal fevers of 1858 and 1859, among our troops in garrison at Canton, the typhomania and rose-coloured eruption which characterise "typhoid" are truly pathognomonic of the lesions to be met with in the autopsies. The history of such cases removes all doubt of the existence of the zymotic causes of typhoid in the southern cities of China, as in the crowded parts of the cities of Europe.

With regard to the affinity of remittent fever to dysentery, Dr. Smart was of opinion that dysentery is a disease as much of periodic type as the fever termed "remittent".

After entering fully into the various modes of treating the fevers and the dysentery of China, Dr. Smart noticed another form of bowel-flux that often proves fatal in that country. This form of disease is sent to the hospital as diarrhœa acholyea, on account of the yeasty or pipeclay stools; as "diarrhœa with marasmus"; or as "diarrhœa with debility", on account of progressive emaciation and loss of energy; and, when aggravated by tenesmus, as "diarrhœal dysentery". It frequently proves fatal; and, most probably, the entire mortality by diarrhœa is attributable to this form of disease.

The same form of disease is known in India as "diarrhœa alba" and "hill-dysentery". It differs from tropical dysentery in not being a disease of deposit, but simply one of nutrition, from non-absorption of aliment, dependent on functional derangement of the chyle-absorbents, the spleen and the liver.

Entozoa are of frequent occurrence, especially among crews of ships on river-service. They were frequently found to exist in men labouring under other diseases, especially climatic fevers and bowel-disorders; and, in autopsies of such cases, these creatures were commonly found alive in the intestines, or, when perforation of these had taken place, in the peritoneal sac.

Diseases of the Nervous System were more frequent in the latter half of the year, and their fatality was highest in the Christmas quarter. The increased rate of invalidings and deaths in the Christmas quarter is very marked under "paralysis" and "delirium tremens".

Hydrophobia, as a consequence of "rabies canina", is known throughout China.

Diseases of the Respiratory Organs were not of sufficiently frequent occurrence to make them of primary climatic importance. The admissions of the entire group amounted to 6.2 per cent. The ratios of deaths, 14.25 per cent., and of invalidings, 40 per cent., indicate more than the average severity of type. These numbers relate to idiopathic diseases; and, although Dr. Smart was not prepared to state the results of pulmonary complications of the climatic fevers, he was of opinion that pneumonia, as a complication of fever, was less fatal, and pleurisy more fatal, than when of idiopathic form.

Phthisis runs its course with unwonted rapidity during the spring and fall of the year.

Syphilis has a very impairing influence on the effective numbers and individual stamina of our seamen on the China station. Although the total number of "genito-urinary diseases" was almost entirely of venereal origin, yet even that large number (nearly 16 per cent. of the nosological table, with 14.8 per cent of invalidings) does not fully realise the enfeebling results of promiscuous sexual intercourse. The syphilitic cachexy is most difficult of eradication from the system in China, and has a marked influence on the effects of treatment in the climatic diseases, more especially in dysentery.

Diseases of Locomotive Organs. Rheumatic affections form the bulk of this group, which comprised 7.7 per cent. of the whole nosological table, of which about 25 per cent. were unfit for further service. This large ratio is due to periosteal disease, as a consequence of syphilis; and from implication of the heart in arthritic cases.

Diseases of the Integuments and Glands constituted 17 per cent. of the total cases of disease, with a ratio of 10 per cent. of invalids, chiefly from abscess and scrofula.

Phlegmon is a distressing complaint to almost all new comers in spring and summer. In the form of furuncle, and sometimes of carbuncle, it displays the direction of the determination of blood, and, it may be, of excess of organic acids, towards the outer surface of the body. A crop of boils is generally regarded as a salutary effort of nature in those whose blood-crasis has not become acclimated to the hot, moist summer season; and they are borne with patience, under the conviction that their outbreak wards off climatic diseases. Boils are often preceded and attended by "lichen tropicus", another imputed salutary effort, of a milder type.

Abscess is often of a severe form. Not having seen any of the "cold" variety, Dr. Smart is disposed to consider acute suppuration in the areolar tissue as the ordinary cause, often setting in on the subsidence of fever. A mortality of 7 per cent. indicates the severity of these cases.

Ulcer in the sloughing form is common, and, when once commenced in a ship, is most difficult of eradication. There is always disordered health in these cases, with a peculiar flushing of the skin, bright red, mucous lining of the mouth, or bleeding gums; sometimes terminating fatally by hæmorrhagic purpura. The urine is always highly acid; and Dr. Smart obtained from it the very finest specimens of uric acid crystals, and sometimes the octohedral oxalates.

Leprosy exists among the Chinese, in the same form as that observed in the Levant. Those affected with leprosy are considered outcasts, and earn their livelihood by begging.

Dr. Smart's paper concluded by his expressing a hope that his brief notes on the diseases of China might evoke the results of the experience of those whose scope of observation had been more extended than his.

The paper was illustrated by elaborate nosological and statistical tables.

A discussion followed, in which Dr. Babington, Dr. Milroy, Dr. Swauston, Dr. Gallagher, Mr. Radcliffe, Mr. Hunt, and Dr. McWilliam took part.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, May 14th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

CASES OF DISEASE OF THE PONS VAROLII.

BY HERMANN WEBER, M.D.

Case i. P. S., aged 25, was affected with tubercles of the lungs. In March, 1854, vertigo and weakness of the limbs of the right side were observed, without alteration of the sensibility. In June the paralysis of movement in the right arm and leg was increased; in addition to which imperfect anæsthesia in the left side of the face and tongue was noted, as also contraction of the pupils, especially the right. In July, after bodily exertion and drinking, rapid increase of the motor paralysis in the limbs of the right side took place, followed by contraction and rigidity in the same, and also by diminution of sensibility. The limbs of the left side became likewise weaker; mastication, deglutition, and articulation were defective. The sensibility in the right side of the face remained unaffected; in the left as mentioned before. On July 24th there was a paroxysm of vertigo and convulsions, with only momentary loss of consciousness, but with permanent loss of power of articulation, deglutition, and protrusion of the tongue. The paralysis of the limbs of the right side was complete, of the left almost so; there was anæsthesia in those of the right, distinct diminution of feeling in those of the left side. The reflex function of the limbs was not quite destroyed. Both pupils were contracted. Death took place eighteen hours after the seizure, under the phenomena of paralysis of respiration.

Post Mortem Examination. In the substance of the left half of the pons Varolii, in close proximity to the superficial organ of the left fifth nerve, a tubercle of the diameter of half an inch was found, with softening of the surrounding tissue, extending posteriorly almost to the floor of the fourth ventricle, and towards the right side beyond the middle line. Hæmorrhage had taken place into the softened tissue. The left trigeminus was thinner than the right.

Three periods could be distinguished in this case. The first, from the commencement of the head-symptoms until July 8th, corresponded to the growth of the tubercle in the lower part of the left half of the pons, pressing on the peripheric portion of the left fifth nerve. The second, from July 8th to July 24th, was one of rapidly increasing softening in the neighbourhood of the tubercle, extending to the posterior layers of the left half of the pons, and also into the tissue of the right half. The third period, beginning with the convulsive attack on the 24th, and comprising the last eighteen hours before death, was connected with the hæmorrhage into the softened tissues, disturbing by pressure also the adjacent healthy parts.

Case ii. C. L., a boy aged 7, affected with chronic hydrocephalus and tubercles of the lungs, had first, towards the end of May, 1856, attacks of convulsions in the left arm, without loss of consciousness; later, the convulsions also attacked the left leg. In the beginning of July vertigo was frequently complained of, and about the same time there was also pain in the right half of the face, especially the teeth, the convulsive attacks in the limbs of the left side having become more frequent. Towards the end of the same month contraction of the pupils was remarked; and in August weakness and wasting of the left arm and leg, without alteration of sensibility. In September the motor paralysis of the limbs of the left side became increased, the convulsions fainter; the pain in the right side of the face became diminished, and was succeeded by anæsthesia. The left pupil was more contracted than the right. In October there were attacks of violent shaking of the whole body, without impairment of consciousness. In the second half of November difficulty of articulation and deglutition occurred; irregularity of breathing during sleep; and contraction of the paralysed limbs. Towards the close of the first half of December the symptoms of tubercular meningitis supervened (namely, headache, sickness, constipation, diminished frequency and irregularity of the pulse, and coma). Death took place on December 31st, 1856.

Post Mortem Examination. In addition to the phenomena of tubercles of the lungs and tubercular meningitis, with increased amount of fluid in the dilated ventricles, a tubercle, between the size of a pea and that of a small hazel-nut, was found in the lower portion of the right half of the pons, near the right fifth-nerve, with atrophy of the latter. The nerve-tissue of the pons surrounding the tubercle was softened, of a yellowish-red colour, exhibiting under the microscope many granule-corpuscles (exudation-corpuscles). The softening did not extend quite to the middle line, and left the posterior layers of the pons unaffected.

In this case, again, the phenomena were easily divided into three periods: the first, from the beginning of the convulsive attacks in May until the middle of November, the anatomical alteration being a small tubercle in the anterior portion of the right half of the pons, near the peripheric origin of the right fifth-nerve; the second period, from the middle of November to nearly the middle of December, anatomically characterised by the red softening of the tissue surrounding the tubercle in the pons; the third period exhibiting the phenomena of tubercular meningitis.

In comparing the symptoms of these two cases during the first period, when the anatomical alterations were almost the same in both, the principal differences were, that in Case II. the limbs of the side opposite to the central lesion were attacked by fits of convulsions previously to their being paralysed; that further, in the same case, pain in the side of the face corresponding to the lesion preceded the anæsthesia; and that the same child had later fits of general shaking, phenomena which were absent in Case I. These phenomena, witnessed only in one case, might be considered as being not the necessary effect of the palpable local alteration, but due to accessory circumstances—as, for instance, a peculiar disposition, an especial state of irritability in the individual in which they occurred, by which disposition the functions of other centres of the nervous system were more easily disturbed, the parts of the brain functionally disordered being frequently more or less distant from those anatomically diseased.

There were on the other side, many corresponding symptoms in both cases: as motor affection, first of the arm, then also of the leg on the side opposite to the anatomical lesion; attacks of vertigo: contraction of the pupils, more so of the one opposite to the tumour; sensitive affection of the face and tongue on the side of the tumour (which, however, was due merely to the relation of the tumour to the fifth nerve); the sensibility of the limbs on each side unaffected, until to the second period, when, in Case I, anæsthesia came on in those of the side opposite to the lesion; wasting of the paralysed limbs, and, at a later period, rigidity in the same; at a very late stage only, impaired articulation, deglutition, and respiration; integrity of the intellectual functions and special senses throughout.

The physiological inferences which offered themselves were: 1. The nerve-fibres for the limbs, passing through the pons, as well motor as sensitive, decussate below the pons. 2. There are no sensitive fibres for the limbs in the anterior (inferior) portion of the pons. 3. The posterior (superior) portion of the pons contains sensitive fibres for the limbs. 4. The intellectual functions of the brain, and also of the special senses, are independent of the pons. 5. Nerves regulating the state of the pupils are in close connexion with the pons. 6. Extensive lesion of the pons is associated with disturbance of deglutition, articulation, and respiration.

These two cases were of great value, on account of the isolated and limited lesion, and the comparatively slow progress of the disease, allowing time for repeated observations. The third case corroborated some of the preceding inferences; with regard to others, it was, through its more complicated nature, of no interest.

Case III. E. S., a female, aged 49, during the last ten years subject to privation and cold, during the last six years often affected with bronchitis, was in September, 1858, suddenly seized with loss of muscular power in the left side of the body, without loss of consciousness, and with only transitory impairment of sensation in the left side. After eleven weeks the paralysis of the left side of the face had almost disappeared; that of the leg was considerably, that of the arm only slightly, improved. On December 30th of the same year the woman lost almost suddenly the power of speaking, swallowing, and protruding the tongue. The right arm was completely paralysed to motion and sensation; the left almost so; and in both legs the motor and sensitive powers were very limited. The reflex function was not quite destroyed. Both pupils were contracted. The consciousness of the patient was unaffected, and remained so until death, but seemed to have been disturbed for a short time in the beginning of the attack. The senses of sight and hearing were free. Dyspnœa and irregularity of breathing, with signs of pneumonia, supervened, and death occurred on January 5th—viz., at the end of the seventh day.

Post Mortem Examination. Remains of an old clot of blood were found close to the anterior and exterior portion of the right corpus striatum. There was yellow softening, of the circumference of a small hazel-nut, in the centre of the superior portion of the pons Varolii—*i.e.*, in the end nearest to the crura cerebri, the softened tissue exhibiting under the microscope fat-globules and granules of various size, only traces of nerve-fibres, and no granule-corpuscles (exudation corpuscles).

Dr. Webster mentioned that Dr. Weber's cases were of great interest on account of the rarity of the affection. In the examination of the brains of 289 cases of lunatics, the results of which were published in the *Medico-Chirurgical Transactions*, the pons Varolii had been only twice affected and then but in a very slight degree. This experience might be considered as being in favour of the inference that the intellectual functions of the brain are independent of the pons Varolii.

LITERARY AND PHILOSOPHICAL SOCIETY OF MANCHESTER.

April 9th, 1861.

ON ATMOSPHERIC PRESSURE AND THE DIRECTION OF THE WIND, IN RELATION TO DISEASE, ESPECIALLY HÆMORRHAGES AND NEURALGIAS. BY ARTHUR RANSOME, M.A., M.B.

After noticing the important physiological effects of atmospheric pressure upon the human body, and the influence of changes in the degree of pressure observed by aëronauts and mountaineers, and by others, as Vierordt, Lehmann, Junod, Macleod, from special experiments, the author treated of the effects upon disease of the ordinary fluctuations of atmospheric pressure, as shown by the barometer. Statements made by Dr. Moffat and others upon the subject were quoted, and from these it appeared that important effects were produced by these fluctuations upon such diseases as apoplexy, menorrhagia, abortions, and neuralgias. Charts were exhibited which contained records of 286 cases of hæmorrhage, 52 of abortion, 179 of apoplexy, and 697 of neuralgic affections. These had been gathered from medico-meteorological tables, published in the Association Medical Journal for the years 1853, 1854, 1855.

The degrees of barometric pressure, on the days and at the several places where the cases occurred, had also been recorded, and reduced to the level of the sea, and a comparison between the two series was obtained by means of curves.

	Cases occurring below mean press.	Cases occurring at or above mean press.
Hæmorrhage	120	166
Abortion	23	29
Apoplexy	86	95
Neuralgic Affections	242	455

The largest number of cases of
Hæmorrhage (28) occurs at 30·150 inches.
,, ,, Apoplexy (16) ,, 30·200 ,,
,, ,, Abortion (7) ,, 29·900 ,,
,, ,, Neuralgia (53) ,, 30·150 ,,

Of Neuralgias also 51 cases occur at 30·000 inches; 50 at 30·200 inches (29·950 inches being the mean height of the barometer).

Other charts were exhibited, which had been drawn to ascertain whether the extent of barometric oscillation between two successive days had any predisposing influence upon these diseases; with respect to hæmorrhage, no such influence could be traced; and neuralgias occurred much more frequently when the fluctuations of pressure were comparatively small.

With respect to apoplexy, the inquiry was carried further, in consequence of a statement that "of the number of cases of apoplexy which occurred (at Hawarden) in the years 1850 and 1851, fifty per cent. took place on days of decreasing reading of the barometer, and fifty per cent. on days *after such* reading." Of 177 cases of apoplexy, 91 occurred with decreasing readings, 87 with increasing readings of the barometer; and of the 87 cases, 44 occurred on days immediately succeeding days of decreasing readings, 43 on days succeeding others of increasing readings.

The sources of error from the influence of warmth or moisture were examined, but no effect was traced to these causes, except in the case of apoplexy.

The following conclusions were drawn from the investigation: 1. A high degree of barometric pressure is favourable to the production of neuralgias, less evidently so to apoplexies and other hæmorrhages; and abortions are not shown to be affected by it. 2. Increasing readings of the barometer are as frequently accompanied by cases of these diseases as decreasing readings. 3. A small extent of diurnal oscillation of the barometer seems to be favourable to neuralgias, no effect from this source being traced upon hæmorrhages.

The action of the several winds was then considered, and statements thereon were quoted from the Association Medical Journal (vol. i, p. 129). These observations did not correspond with the results obtained by Mr. Ransome. A large proportion of the cases of neuralgia noted were not followed by any change in the direction of the wind the day following; and cases of apoplexy, convulsions, and rheumatism, were noted with the wind from nearly every quarter. Charts were shown representing the relative frequency of attacks of neuralgia with the wind in the several quarters. No very definite conclusion could be drawn from these charts; but the prevalent notion, that easterly winds produced these affections, was to some extent corroborated, although it was also evident that south-west and west winds are often accompanied by cases of these diseases.

Correspondence.

DRESSING OF SCALP-WOUNDS.

Letter from A. Prichard, Esq.

Sir,—I wish to add my testimony in favour of the plan of dressing scalp-wounds by tying the hair across the cut, having used it for many months at the Royal Infirmary here and in private. During the Whitsuntide holidays recently gone by, there have been several such cases; and my pupil, Mr. Waugh, who has dressed them, after tying the hair, has twisted a little piece of stick underneath so as to tighten the band and ensure complete contact. This plan seems to answer very well, and the wounds dry up at once, and I believe that they heal best without any further dressing. I am, etc.

Augustin Prichard.

Clifton, Bristol, May 26th, 1861.

DRESSING OF SCALP-WOUNDS.

Letter from W. A. Bryden, M.D.

Sir,—Mr. Legge's letter in the Journal of May 25th, on the subject of the "dry hair-suture" (if I may so designate that plan of securing union by the first intention in cases of wounds of the scalp), recalls to mind the fact that my valued friend, Mr. O'Donovan, published a paper on the same subject in the 43rd Number of the British Medical Journal in 1857. *Palmam qui meruit ferat.* I am, etc.

W. A. Bryden.

Medical News.

APPOINTMENTS.

*Morgan, W. W., Esq., appointed a Magistrate for the Borough of Newport, Monmouthshire.

Royal Army. The following appointments have been made:—

Banon, Surg. R. G. D., to be Staff-Surg.-Major, *vice* Cunningham.
Carey, Staff-Surgeon T., to be Surgeon 87th Foot, *vice* Bauon.
Cunningham, Staff-Surgeon J. P., M.D., to be Surgeon 60th Foot, *vice* Schooles.
Lithgow, Assistant-Surgeon S. A., to the 3rd Dragoon Guards, *vice* Stanley.
Pilleau, Surgeon-Major H., retiring on half-pay, to have honorary rank of Deputy-Inspector-General of Hospitals.
Schooles, Surg. H. J., M.D., to be Staff-Surg.-Major, *vice* Pilleau.
Wordsworth, Surgeon D. C., to be Staff-Surgeon, *vice* Webb.
Webb, Staff-Surgeon H. M., M.B., to be Surgeon 12th Foot, *vice* Wordsworth.

To be Staff-Assistant-Surgeons:—

Adams, Assistant-Surgeon G. F., 3rd Foot, *vice* Grant.
Ashby, Assistant-Surgeon J. F., 11th Foot, *vice* Flynn.
Beale, Assistant-Surgeon R. H., 53rd Foot, *vice* White.
Beveridge, Assistant-Surgeon A. W., M.D., 78th Foot, *vice* Alcock.
Bicknell, Assistant-Surgeon H., 84th Foot, *vice* Jones.
Carson, Assistant-Surgeon R. B., M.B., 2nd Foot, *vice* Quinlan.
Davidge, Assistant-Surgeon J., 26th Foot, *vice* Lamb.
Everet, Assistant-Surgeon W., *vice* Wall.
Finlay, Assistant-Surgeon G. H., 55th Foot, *vice* Walters.
Gardiner, Assistant-Surgeon W. A., 16th Foot, *vice* Harvey.
Haward, Assistant-Surgeon W., 87th Foot, *vice* Goodwin.
Hinde, Assistant-Surgeon G. L., 41st Foot, *vice* Wilson.
Hinton, Assistant-Surgeon J., 15th Foot, *vice* Wills.
Hollingsworth, Assist.-Surgeon T. S., 24th Foot, *vice* Gillespie.
Jeffcoat, Assistant-Surgeon J. H., 9th Foot, *vice* Baxter.
John, Assistant-Surgeon W., 29th Foot, *vice* Adams.
Johnston, Assistant-Surgeon J. S., M.D., 24th Foot, *vice* Baker.
Leet, Assistant-Surgeon C. H., 5th Foot, *vice* Fazdowski.
Lindsay, Assistant-Surgeon R., M.B., 39th Foot, *vice* White.
McKinnel, Assistant-Surgeon J., M.D., 73rd Foot, *vice* Hope.
Mackinnon, Assistant-Surgeon C., 61st Foot, *vice* Davidson.
Murray, Assistant-Surgeon D., M.D., 100th Foot, *vice* Heath.
O'Loughlin, Assistant-Surgeon J. E., 8th Foot, *vice* Pout.
Peppin, Assistant-Surgeon H. C., 2nd Foot, *vice* Lever.
Preston, Assistant-Surgeon F. H., 22nd Foot, *vice* Riordan.
Ramsay, Assistant-Surgeon W., M.D., 37th Foot, *vice* Gore.
Saunders, Assist.-Surgeon R. W., M.D., 23rd Foot, *vice* Thompson.
Stanley, Assist.-Surg. St. John, 3rd Dragoon Guards, *vice* Maunsell.
Wiles, Assistant-Surgeon J., 5th Foot, *vice* Bracken.

Royal Navy. The following appointment has been made:—

Wright, F. L. W., Esq., Assist.-Surg. (additional), to the *Victory*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Barrett, B., Esq., to be Assistant-Surgeon 8th Lancashire A.V.
Callon, W. J., M.D., to be Assistant-Surgeon 1st Lancashire A.V.
La Croix, F., Esq., to be Surgeon 1st Administrative Battalion Hants R.V.
Morris, E., Esq., to be Assistant-Surgeon 2nd Devon Regiment of Militia.
Price, H. W., Esq., to be Surgeon 1st West Riding A.V.
Rogers, J. F., Esq., to be Assistant-Surgeon 39th Middlesex R.V.
Rump, H. R., Esq., to be Surgeon 1st Administrative Battalion. Norfolk R.V.
Thwaites, T. B., Esq., to be Assistant-Surgeon 4th Durham R.V.

To be Honorary Assistant-Surgeons:—

Booth, J. G., Esq., 84th Lancashire R.V.
Dry, H., Esq., 24th Company Surrey R.V.
Hunter. R. T., Esq., 19th Glamorganshire R.V.
Jones, W., M.D., 2nd Anglesey A.V.
Lees, B., Esq., 8th Shropshire R.V.

DEATHS.

Buck. On May 25, aged 9, Gertrude, youngest daughter of Thomas Buck, M.D., Prince's Place, Kennington Park.

Croft. On May 23, at Bracknell, Sarah Ophelia, wife of Thomas Croft, Esq., Surgeon.

Falconer. On May 25, at Bath, aged 11, Randle W., youngest son of *R. Wilbraham Falconer, M.D.

Kennedy. On May 23, at Great Malvern, aged 84, Harriet, widow of Alexander Kennedy, M.D., formerly of the Madras Army.

Spalding. On May 19, at Elie, Fife, aged 72, Jane Rankin, widow of the late Hinton Spalding, M.D., of Jamaica.

Stephenson. At Nottingham, on May 23d, aged 11 months, Annie Evelyn, only child of T. Appleby Stephenson, Esq., Surgeon.

Sutherland, Alexander R., M.D., F.R.S., at Torquay, aged 79, on May 24.

Thomson, Henry U., M.D., at Dover, aged 76, on May 23.

Royal College of Surgeons. The annual election of Fellows into the Council, in the room of three members going out in rotation, will take place at the College on Thursday, July 4th, at 2 p.m.

Drainage of London. A return just made by the Metropolitan Board of Works states that it may be expected that, by about the end of 1862, sewage will be diverted from the Thames to the extent of 50,000,000 gallons a day, besides the rainfall.

University of London. Sir John Romilly writes, in answer to a deputation request, that he will consider it a great honour to be elected representative of London University in the House of Commons, should the Bill now before the House, which gives a representative to the University, be passed into law.

University in California. The first commencement of the medical department of the University of the Pacific was recently held at San Francisco. There seems to have been quite an effort to make an impression, if not a sensation. There were six graduates, being the first crop of doctors on the Pacific side of the continent. (*Phil. Med. and Surg. Rep.*)

Geology. Our friend of Torquay, William Pengelly, Esq., F.G.S., has consented to deliver a lecture at Oxford, on the Fossils of Devonshire, in illustration of the collection made by himself, and presented to the University by Miss Burdett Coutts. The lecture will be delivered in the Great Lecture-room in the University Museum, at 3 p.m., on Friday, June 7th.

The Association for Social Science. On Saturday evening, the National Association for the Promotion of Social Science held a *conversazione* for their members and friends at the South Kensington Museum. The picture galleries, the Ford collection, and the Educational Museum were thrown open, and their varied and attractive contents were the means of amusement to an assembly of upwards of 1,000 guests of social, literary, and artistic distinction.

University of Cambridge. A valuable museum of Vertebrate Animals has been offered to the University of Cambridge by Dr. Goodacre, and the collection having been examined by Mr. Churchill Babington, of St. John's College, and the Master and Fellows of Downing College having consented to the placing of the collection in a room in the college for a period of a year from the present time, the Council have recommended to the Senate that the offer of Dr. Goodacre be accepted.

Compulsory Registration Certificates. Petitions from medical practitioners, complaining of being obliged by statute to grant gratuitously certain professional certificates, have been presented to Parliament by Mr. Black (5), from Edinburgh; by Mr. E. Craufurd, from Dr. Craig and Dr. Burns (Ayr), Dr. Johnston (Irvine), and Dr. Gibson (Campbelton); by Mr. W. Ewart, from Thomas Williamson, surgeon; by Mr. Baxter, from Mr. Edward, surgeon, Forfar; and by Mr. Merrey, from Dr. Rankin, Airdrie; also from Mr. Conborough, surgeon, Falkirk; and from other persons and places.

Serious Accident to a Surgeon. On Wednesday week, at a late hour, a serious accident occurred to Mr. J. C. Hoyle, assistant to Mr. Williams, surgeon, of Guilsborough. Mr. Hoyle was returning on horseback from Northampton, after hearing the Rev. Mr. Spurgeon, and, when passing the toll-bar, his horse was observed to start off suddenly; and shortly afterwards two persons in a gig, observing some object lying in the road, alighted, and discovered Mr. Hoyle lying insensible, and deluged in blood. It was then found that he had received concussion of the brain, and other serious injuries; and, notwithstanding the most unremitting care, he still lies in a most precarious condition.

British Fossils. The Trustees of the British Museum have recently acquired the valuable collection of British fossils figured and described in the *Mineral Conchology* of the late Mr. James Sowerby, and by his son Mr. I. de Costa Sowerby, Curator of the Royal Botanic Society's Gardens, Regent's Park. This work contains six hundred and forty-eight copper-plates, representing eleven hundred species of fossil shells. It exercised a greater influence on the early study of geology than perhaps any other publication whatever, and it will be a great advantage to those engaged in preparing special treaties on fossils to be able to consult the original specimens of the Sowerbys in the cabinets of the British Museum.

The Dublin College of Physicians. The *Dublin Medical Press* tells us that "a mandamus was applied for on Monday last, to compel the Registrar of the Branch Council to insert the title of Doctor of Medicine after Dr. Barker's name in the *Medical Register*. Mr. Brewster, Q.C., addressed the Court on the part of the Branch Council; and Mr. Walsh, Q.C., for Dr. Barker. Two questions were raised: firstly, whether the Branch Council had any right to erase the qualification or title without the concurrence or in antagonism to the General Council; and secondly, whether the College of Physicians had any right to grant any such degree as Doctor of Medicine. Mr. Walshe urged the Court to grant the order for a *mandamus*, in which case the Registrar may apply for a writ of error." The judgment of the Court will, we suppose, decide the question as to the power of the King and Queen's College of Physicians to grant the title of M.D.

East India Army Medical Department. We understand that a petition is to be presented to both Houses of Parliament in a day or two from the Parsees resident in London, Liverpool, and Manchester, praying that Muncherjee Beramjee Colah, one of their fellow-countrymen, who has qualified himself for admission into Her Majesty's medical service, may be allowed to offer himself for examination, he having been excluded by the Army Medical Department, on the ground that the recent amalgamation of the Indian and British forces would require army surgeons to serve in cold climates, which natives of India would be unfit for. The petitioners state, that "the Parsees accompanied the British forces to Affghanistan, the climate of which is very cold, and that many other of their countrymen are permanently settled in almost every English camp in India, and bear the climate as well, if not better, than any other of Her Majesty's subjects." The petitioners bring forward the opinions of several eminent medical men of the three towns, London, Liverpool, and Manchester, in confirmation of their physical ability to bear the cold of this and any other climate; and the petitioners rely upon Her Majesty's proclamation, published by the Governor-General of India, after the mutinies in 1858, "that all Her Majesty's subjects, of whatever race or creed, should be freely and impartially admitted to all offices in the service, the duties of which they may be qualified by their education, ability, and integrity fully to discharge."

St. Mary's Medical School. Yesterday afternoon, the prizes awarded to the successful students in St. Mary's Hospital Medical School were distributed by the Very Rev. the Dean of Canterbury, in the theatre of the institution. A numerous company witnessed the distribution. Mr. Gascoyen, the Dean, gave a very favourable account of the condition of the Medical School. The Very Rev. Chairman then distributed the prizes as follows:—Winter Session, 1860-61—Scholarships in Anatomy, value £25, Mr. Humphry Davy. Winter Session, 1859-60—Prize for Students of the First Year, Mr. Charles Richards. Winter Session, 1859-60—Prize for Students of the Second Year, Mr. Arthur Trehern Norton; Certificate of Honour, Mr. N. Engleheart Cresswell. Practical Anatomy, 1859-60—Prize, Mr. Edward Parker Young. Operative Surgery, 1859-60—Prizes, Mr. Robert Winter, Mr. Arthur Trehern Norton; Certificates of Honour, Mr. Frederick J. Rogers, Mr. J. Macnamara Packer, and Mr. Wykeham H. Lydall. Summer Session, 1860—Prize for Students of the First Year, Mr. Thomas Thorman. Summer Session, 1860—Prize for Students of the Second Year, Mr. Arthur Trehern Norton. Comparative Anatomy, 1860—Prize, Mr. J. Macnamara Packer. Natural Philosophy, 1860—Prize, Mr. Jordan Roche Lynch. Winter Session, 1860-1—Prize for Students of the First Year, Mr. Milner Montgomery Moore; Certificates of Honour, Mr. Charles Owen Asprey and Mr. Carey Pearce Coombes. Winter Session, 1860-1—Prize for Students of the Third Year, Mr. John Edward Morgan. The distribution having been completed, the Dean of Canterbury briefly addressed the students in affectionate terms. He touched with much delicacy on various difficulties they were likely in after life to encounter, and earnestly urged them always to act the part of Christian gentlemen. The address was listened to with deep interest, and was at the conclusion heartily applauded.

The Civil War in America. The Medical Profession in the large cities throughout the country are engaged in giving gratuitous instruction to volunteer surgeons and nurses in connexion with their respective duties, in view of the probability of war. The medical and surgical staff of our large city hospitals have offered to aid by their advice in organising the medical department of the army. The committee appointed to make the necessary arrangements for the annual meeting of the American Medical Association in the present June, after due consultation with prominent members in distant sections of the country, have given notice that the said annual meeting will be postponed until the first Tuesday in June, 1862, on account of the present grievously disturbed condition of the whole country. At a meeting of the Essex Medical Union, the following resolution was unanimously adopted: "That the members of this society agree to render gratuitous professional service to the families of those who may enlist for the war, when desired."—At a meeting of the Newark Medical Association, the following resolution was unanimously adopted: "That we, members of the Newark Medical Association, regularly constituted physicians and surgeons, recognising the obligations of patriotism, do hereby hold ourselves in readiness to obey any call which may be made by the Government upon our professional services during the present fearful crisis through which the country is passing."—*The Philadelphia Medical and Surgical Reporter* (from which we have gathered the preceding information) says: "We hear of large numbers of medical men enlisting as surgeons in the army. Among them are some of our subscribers and contributors in both sections of the country. If any of them should be called upon to perform active duty in their capacity as surgeons, we shall expect to hear from them. In the unsettled condition of the country there will, almost of necessity, be great irregularity on some of the mail routes, interfering for a time with the prompt and regular delivery of the *Reporter* to subscribers. When the political cauldron ceases to seethe, and things generally are 'put to rights,' we shall try and aid our subscribers in making up the deficiencies in their files, though we hope they will not throw all the burden upon us, as we are mailing their numbers to them regularly every week."

Varieties.

Rather Strong. The enduring odour of musk is astonishing. When Justinian, in 538, rebuilt what is now the mosque of St. Sophia, the mortar was charged with musk, and to this very day the atmosphere is filled with the odour.

Safety Medicine Bottles. These bottles are made with contracted necks, so as to allow the fluid to flow in drops; some of them have their necks ground in and movable, for filling; others have an opening at the bottom, for filling, which is closed by a cork; while others are made of dark coloured glass, with fluted sides.

An Honour to be Avoided. A Philadelphia medical journal writes thus to a correspondent:—"The 'Medical University' of which you inquire is a hybrid concern, having no standing or respectability, or claims on the medical profession whatever. A diploma from it would have the effect of *excluding* you from membership in any respectable state or county medical society."

The Balance of Account. The balance of account between satisfaction and remorse was jocosely stated by Dr. Warren to Lady Spencer, who had said she thought the frequent reflection, that a different treatment might have saved their patients, must embitter the lives of medical men, he told her that the balance was greatly in favour of satisfaction, for he hoped to cure her *forty* times before he killed her *once*. (*Physic and Physicians.*)

Ordinary Sponge is one of those precious common things which largely contribute to the comfort of civilised man. Its uses, which are very numerous, depend on its peculiar flexibility, porosity, elasticity, and compressibility. In the hope of finding another substance with the same properties equally well balanced, we might ransack the three kingdoms of nature in vain. In the attempt to replace this unique product by a manufactured article, we might waste as much time as the alchemists of old wasted in their fruitless researches. And this wonderful substance, for which we shall probably never find or make a substitute, is produced by animals in which we can discover no trace of special organs—animals of so humble a type that it is difficult to draw a line of demarcation between them and the lowest plants.

The Doctor's Model Wife. In an eloquent eulogy of the late Dr. Francis, by Dr. A. K. Gardner of New York, is an allusion to the companion of his life. "That Dr. Francis achieved all that he did, is in no small degree owing to the opportunity afforded for the expansion of his genius by the freedom from domestic cares, by the methodical disposition of household matters, by the relief from many of the annoyances, petty vexations, and harassing disturbances incident to the life of a practising physician. She it was who attended to the innumerable callers desirous of the doctor's signature to petitions, influence with parties or mere loungers, aiming only to pass some of their vacant hours agreeably. She received his professional calls, arranged his numerous consultations, remembered the ages of the children in his practice, provided virus, and saw that they were duly vaccinated. She attended to the nightly calls, thus preventing the exposure which, to the doctor, was so apt to be followed by the most serious laryngitis. I have necessarily alluded to these facts, because to them the doctor owed so much of the time which he used to such good purpose, and because it seemed due to pay a passing tribute to the exemplary, devoted, genial, beloved woman, the pattern doctor's wife."

London Sewers. London is said to be "the best sewered large city in the world," and this, no doubt, is true. But London sewers require many improvements. The flat inverse and ruinous sides retain all the foul solids, and the subsoil soaks in the tainted fluids, so that the earth beneath and the air above are alike poisoned. The greater portion of the sewers in Westminster, around and within Buckingham Palace, and about Belgravia, have been constructed of bad sectional forms, with defective, spongy, porous bricks and inferior mortar, and are, consequently, inefficient. Fever has prevailed in the neighbourhood. The foul sewers of London taint the atmosphere in the streets, and, through drains, contaminate the air within the houses. Many of the inhabitants of London judge as to changes of weather by the effluvium from their drains. During the so-called disinfecting operations of last summer, the peculiar taint of certain disinfecting material passed down the main sewers, was perceived within the houses on each side of the streets; proving that sewer gasses constantly have access to the interior of such houses.

The Jews' Hospital in New York is conveniently and thoroughly appointed. The wards are kept scrupulously clean, and are provided with separate appurtenances for purposes of bathing and cleanliness. The institution has been open six years. It is intended solely for the relief of Jews, and, though a number of the contributors are members of a different faith, they are allowed no part in the management. The house physician, the superintendent, and most of the assistants, are Jews, and their own ministers in turn have charge of the spiritual welfare of the inmates. One room in the hospital is devoted to divine worship, and is provided with a reading-desk, an ark enclosing scrolls of parchment containing their law, the books of Moses inscribed in Hebrew characters; and their service is rendered in Hebrew, as in all Jewish synagogues. In accordance with the injunctions of the Hebrew law-giver, no prohibited food (see Leviticus, chap. xi) is permitted within the walls. Thus everything is conducted in strict accordance with their ancient customs, in conformance to some of the curious dogmas of which prohibiting "mutilation of the dead," they do not, except under rare circumstances, allow investigations by examination *post mortem*, thereby depriving the medical attendants of their only source of satisfaction in doubtful diagnosis. The hospital is supported by private subscription and donations, some of which have been of a most princely character.

Daniel Lambert possessed, except as regarded his corpulence, one of the finest constitutions possible, and was one of the most temperate and active of men; yet he died, apparently of sheer exhaustion, at an early age. The only disorder he ever suffered from was a slight attack of inflammation, or feverishness, although, if he got wet through, he would never change his clothes, and when out boating, was often drenched the whole night. Possibly his extreme temperance contributed to his resistance of cold, as he was a small and careful eater. He never drank anything but water. He slept less than other men, and could wake within five minutes of any time he wished. He was so active, that even when he had grown to be a big man, he could kick to the height of seven feet; and when thirty-two stone weight, he walked from London to Woolwich with less fatigue than several middle-aged men. In his youth he was passionately fond of field-sports, and always retained his taste for them. He was a man of a peculiarly honourable, retiring, and delicate mind. Lambert died without any visible disorder, and quite suddenly, in his fortieth year. At that time he weighed nearly fifty-three stone, being almost eleven stone heavier than Mr. Bright of Maldon. Lambert was nine feet four round the body, and three feet one round the leg; yet so little inconvenience or oppression did his immense bulk occasion him, that Dr. Heaviside said his life was as good as that of any other man. (*All the Year Round.*)

The Doctor's Servant. We all know what a respectable man he is, what a hard dry man, what a firm man, what a confidential man; how he lets us into the waiting-room, like a man who knows minutely what is the matter with us, but from whom the rack should not wring the secret. In the prosaic "season", he has distinctly the appearance of a man conscious of money in the savings bank, and taking his stand on his respectability with both feet. At that time it is as impossible to associate him with relaxation, or any human weakness, as it is to meet his eye without feeling guilty of indisposition. In the blest Arcadian time, how changed! I have seen him, in a pepper-and-salt jacket—jacket—and drab trousers, with his arm round the waist of a bootmaker's housemaid, smiling in open day. I have seen him at the pump by the Albany, unsolicitedly pumping for two fair young creatures, whose figures, as they bent over their cans, were—if I may be allowed an original expression—a model for the sculptor. I have seen him trying the piano in the doctor's drawing-room with his forefinger, and have heard him humming tunes in praise of lovely woman. I have seen him seated on a fire-engine, and going (obviously in search of excitement) to a fire. I saw him, one moonlight evening when the peace and purity of our Arcadian west were at their height, polk with the lovely daughter of a cleaner of gloves, from the door-steps of his own residence, across Savile Row, round by Clifford Street and Old Burlington Street, back to Burlington Gardens. Is this the Golden Age revived, or Iron London? (*All the Year Round.*)

What to observe in Lichens. There are no plants so variable in character as the lichens; none in which it is, consequently, so difficult to decide what are species and what are varieties. In order to a comprehensive knowledge of species, it is necessary to study individuals in every condition of growth and from every possible habitat. Hence the commonest species and varieties become of value—the more so if collected in countries comparatively unexplored botanically; for lichens are no exceptions to the rule that geographical differences are attended by corresponding differences in the characters of the same plants. Every collector of lichens—however common and well-known the latter may be—may therefore consider himself as contributing towards a more scientific and philosophical, because more comprehensive, knowledge of a very Protean but interesting group of plants. If the collector make a point of gathering specimens of everything he meets which belongs to the lichen family, he will run a good chance of including some novelties, perhaps new species or varieties. New species are most likely to be met with among the very minute crustaceous lichens which grow on rocks or trees, and which cannot be properly studied without the aid of the microscope; among species belonging, for instance, to such genera as *Lecidea*, *Lecanora*, *Grophis*, *Opegrophia*, *Calicium*. It is not to be expected that the tyro should make these microscopical examinations or discoveries for himself: he will probably require the assistance of some experienced microscopist or lichenologist. The applications of lichens to the arts are daily becoming more numerous and important. New dye-lichens are being discovered in India and the East. Again, recently the probability has been shown, on good ground, that a lichen—the *Lecanora esculenta* of Pallas—was the Manna of the Bible. The colorific capability of a lichen, so far as regards a red or purple dye of the nature of orchill or cudbear, may be readily discovered by simply macerating the lichen—chopped into small fragments, or pulverised according to the nature of its thallus—in a weakish solution of liquor ammonia—

allowing the mixture to stand a few days in a warm part of the house, and shaking it frequently, so as to expose the mass to the action of the air. The colorific capability of a lichen, so far as regards other colours—chiefly brown and yellow—may be easily ascertained by simply boiling the lichen, chopped or pulverised as before, in a small quantity of water. Whether and how much mucilage or starch a lichen contains may be ascertained by the same means as last mentioned, and allowing the mixture to cool, when it will gelatinise more or less, if it contain much mucilage. Lichens are very easily collected and transported; they require no sort of preparation; they may be simply allowed to dry in the open air, and packed as convenient. Those growing on trees generally require the piece of bark on which they grow to be sliced off with a knife, and those on stones the piece of rock to be broken with a hammer. Both may be wrapped in paper, like mineralogical specimens. In all cases, the localities and dates of collections should be mentioned, and any further information as to uses, etc., which may be known to the collector. (*Dr. W. Lauder Lindsay.*)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.

FRIDAY. ...... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Epidemiological, 8 P.M.: Dr. Archibald Smith, "On the Spotted Hæmorrhagic Yellow Fever of the Peruvian Andes in 1854-5-6, etc."; Dr. Livingstone, "Note on the Treatment of Fever in the Zambesi."—Entomological.

TUESDAY. Photographic.

WEDNESDAY. Obstetrical, 8 P.M.: Dr. Graily Hewitt, "On Unusual Elongation of the Fœtal Head as a Cause of Difficulty in the Application of the Ordinary Obstetric Forceps; with Description of a Modified Form of Instrument to be used in such cases"; Mr. Nunn, "Observations on Acute Inflammation and Abscess of the Breast."—Pharmaceutical, 8.30 P.M.—Geological.—Ethnological.

THURSDAY. Antiquarian.—Linnæan, 8 P.M.—Chemical, 8 P.M.—Harveian, 8 P.M.

FRIDAY. Royal Institution.—Archæological Institute.—Western Medical and Surgical, 8 P.M.

SATURDAY. Royal Botanical.—Army Medical and Surgical, 7.30 P.M.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—MAY 25, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week..........................	Boys .. 892 Girls.. 934	1826	1237
Average of corresponding weeks 1851-60		1640	1157

Barometer:
Highest (Sun.) 30.245; lowest (Sat.) 29.637; mean 30.009
Thermometer:
Highest in sun—extremes (Th.) 119 degs.; (Wed.) 82 degs.
In shade—highest (Th.) 80.2 degrees; lowest (Sun.) 36 degrees.
Mean—57.5 degrees; difference from mean of 43 yrs.+3.5 degs.
Range—during week, 44.2 degrees; mean daily, 24.3 degrees.
Mean humidity of air (*saturation*=100), 73.
Mean direction of wind, Var.—Rain in inches, 0.50.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PROFESSIONAL PROMOTION OF HOMŒOQUACKERY.—A Hospital Surgeon writes: That the names of the gentlemen who signed the letter to a celebrated medical man, demanding that he should give up consultations with homœoquacks, if he wished to continue in their favour, ought to be published; in that they did an honourable act of professional duty. [We can only say, in reply, that if the gentleman who communicated the above fact to us will give us permission, we shall be very happy to honour our JOURNAL by inserting the names of the honourable protestors. In latitudinarian days of professional morality, a simple act of duty becomes a highly meritorious act. EDITOR.]

COMPENSATION TO MEDICAL AUTHORS.—It is stated that the medical book publishers, Blanchard and Lea, have long been in the habit of reprinting foreign works from sheets furnished by the authors, or publishers, and to whom compensation has been duly made. (*New York Medical Times.*) [We should be curious to know whether any of our English *confrères* have been lucky enough to taste some of the aforesaid liberality.]

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, June 1861.

COMMUNICATIONS have been received from:—Mr. HENRY LEE; Dr. M'WILLIAM; Dr. WM. BUDD; Mr. A. PRICHARD; Dr. E. L. FOX; Dr. JAMES GRAY; Dr. GRAILY HEWITT; Dr. THOMAS SKINNER; Mr. J. ARMITAGE PEARSON; Mr. D. KENT JONES; Dr. F. H. HEWITT; Dr. WATERS; Mr. WINTER; Mr. J. HINTON; Dr. BRYDEN; Dr. MUNROE; Mr. T. M. STONE; Mr. J. PRANKERD; and Mr. W. W. MORGAN.

BOOKS RECEIVED.

1. Ready Rules for Operations in Surgery. By Allan Webb, M.D. Second edition. London: 1861.
2. A Manual of Minor Surgery and Bandaging; for the use of House-Surgeons, Dressers, and Junior Practitioners. By Christopher Heath, F.R.C.S. London: 1861.
3. An Oration delivered before the Hunterian Society, February 13th, 1861. By William W. Gull, M.D. London: 1861.
4. On Acute Ophthalmia as it occurred in the Left Wing of H.M.'s 37th Regiment in 1851-52. By J. W. Fleming, F.R.C.S. London: 1861.
5. The Influence of Atmospheric Changes upon Disease. By Arthur Ransome, M.B., B.A.
6. Instructions to Mothers and Nurses in the Lying-in Chamber. By J. C. L. Marsh, M.D. London: 1861.
7. On Some of the Medico-Legal Relations of the Habit of Intemperance. By Robert Christison, M.D. Edinburgh: 1861.

ADVERTISEMENTS.

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½ oz. Moulded Phials		....	4s. 6d.	„
1 oz.	ditto	....	5s. 6d.	„
1½ oz.	ditto	....	6s. 0d.	„
2 oz.	ditto	....	7s. 0d.	„

NOTICE.—S. ISAACS and SON beg to return their sincere thanks to the Medical Profession for past favours, and beg to inform them that in consequence of the great increase in their business, they have removed to more extensive premises, and hope by adhering to their usual attention and punctuality to receive a continuance of their favours at their new London Warehouses, 24 and 25, Francis Street, Tottenham Court Road. Packages free. Remittance on receipt of Goods. Post-office Orders payable to S. ISAACS and SON, at the Post Office, Tottenham Court Road. Bankers—Unity Bank.

TO ADVERTISERS.

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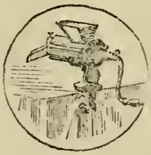

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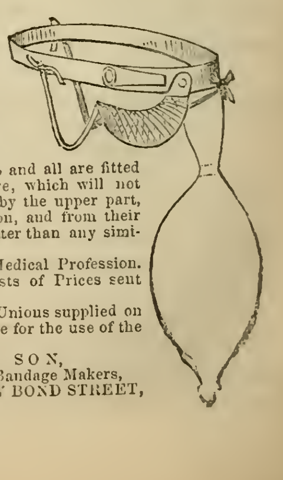

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Clinical Lecture

ON

BLOOD-LETTING IN APOPLEXY.

DELIVERED AT

ST. MARY'S HOSPITAL, FEBRUARY 16th, 1861.

BY

THOMAS K. CHAMBERS, M.D.,

FELLOW AND CENSOR OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON; PHYSICIAN TO ST. MARY'S HOSPITAL; ETC.

No. in Victoria Ward is a case of apoplexy.

The patient is a housemaid, years of age, who was always, by the account of her fellow-servants, quite well up to one morning when she was cleaning her master's grate, and fell down entirely deprived of sense and motion. Two hours afterwards she was brought to the hospital, when she was still quite insensible and motionless. There was snoring breathing, the cheeks being so paralysed as to be puffed out in expiration; the skin was dark and cold; the pulse weak, quick, and irregular. The pupils of the eyes were contracted partially, and insensible to light. She was placed in bed; hot bottles were applied to the feet and other parts of the body; and she had administered a stimulating purgative enema. Seven hours after the fit, the skin got warm; the pulse and heart beat strongly, and numbered 140 in the minute; and it was observed that the paralysis, though complete on the left side, was not so on the right. She was then bled to the extent of eight ounces from the arm; and, four hours afterwards, another eight ounces of blood were taken from her. The pulse sank to 100 or so; and she has since then recovered her senses and the use of her tongue, though not of her left side, or control over the sphincters.

The question of the propriety of taking blood, and of the mode of taking blood in cases of coma, apoplexy, and paralysis, is a very serious one. Delay may be irretrievable; yet a false step is equally fatal. The diagnosis of the actual morbid changes in the skull is very obscure, even if a full history of the patient could be obtained; and, in the majority of instances, such a history is unattainable at the time you have to act. It is necessary, therefore, to have clear, definite rules of conduct laid down previously in your minds, and to be firmly persuaded of their justice and accordance with reason; otherwise you will be tortured, when too late, with the dread of having acted wrong. And you must make the circumstances which determine these rules such as may be learnt rather from the present appearance of the patient than from the history.

In the first place, let us clearly understand what is the *modus operandi* of the means you design to employ, and then what morbid conditions it can and what it cannot relieve.

The two most marked immediate effects of blood-letting are, diminution of the force of the heart, and contraction of the area of the blood-vessels. That these are the most important and most direct of the resulting phenomena, is shown by their being in direct proportion to the dose; the more rapid and copious the detraction of blood, the more certainly they follow. Both natural and artificial hæmorrhage thus produce first syncope, or failure of heart-power; and then a slackening and arrest of the blood-stream by contraction of the vessels.

What now are the morbid conditions in apoplexy which such results as these are likely to benefit? I am not going to enumerate all the causes of apoplexy, because such a recapitulation would be very unsuited for the purpose of the present lecture, and, if they came into your head at the time you were in presence of your patient, would serve rather to confuse than to clear your ideas. A most practical thing to do will be to divide them into three heads with reference to the treatment to be pursued; and I think you will find them all capable of being classified under *destruction* of the nerve-fibres, *compression* of the same by a *solid*, and *compression by a fluid* substance.

Now, if the nerve-fibres be destroyed, as is the case, for example, in what appears after death as a softening of the cerebral substance, it seems unadvisable to take away the pabulum of nutrition; for you would be diminishing the power of the remaining brain-tissue to take the place, as far as it can, of that which is irretrievably lost. Nor are the immediate effects of blood-letting likely to be advantageous; for in these cases the force of the heart is not morbidly augmented, and the blood-stream is in general rather deficient in quantity already. We shall probably be only adding to the disease by subtracting blood. When, then, we have reason to think from the previous history that there is old disease leading to softening of the cerebral substance, we should abstain from bleeding altogether. If, for instance, there have been before the present attack a state of mental excitement, or severe headache, or feverishness; or if the gait have been unsteady, the speech thick and stammering; if there have been earache, or a purulent discharge from the auditory meatus; if previous to the apoplexy, there have been convulsions; if the patient be scrofulous, or of a scrofulous family,—we must take all these circumstances as warnings against the lancet—altogether, probably, but certainly against its immediate use.

Supposing, however, that we have no evidence of such a diseased state of the cerebral substance, and can allow ourselves to conjecture that the nerve-fibres are more compressed than permanently disorganised, then we have further to consider whether the compressing substance is *solid* or *fluid*. By a solid likely to cause apoplectic paralysis, I refer to a clot of blood which has been thrown out long enough to become entirely coagulated. This is the only solid sufficiently common as a cause for us to consider. Is it likely you have to deal with anything of this sort? Is there in the patient's brain before you at the moment a clot of blood such as you see put up in bottles in the museum, and often also in the dead-house? Do not be in too great a hurry to conclude so at once. Four days ago, you saw on the dissecting-table the corpse of a man who more than thirty-six hours previously had fallen down stairs, and was supposed to have fractured his skull; the cranium was uninjured, the fall was apoplectic, and there was a quantity of fluid blood pressing upon the brain. You see by such instances as these that blood extravasated from the vessels inside the body does not coagulate immediately, as it does when drawn from a vein; it remains long, and may remain much longer than it did in that case, in a liquid state. It takes, not minutes, not hours, but I may really say days, to become solid. When the apoplexy or paralysis has lasted for days, then indeed, but not till then, you may conclude that a clot has formed; and then, and not till then, may you pronounce that the force of the heart's action will not increase the oozing of blood into the focus of pressure. After that—after you have a solid, and not a fluid pressure, to deal with—I am willing to concede, and anxious to impress upon you, that abstraction of blood is useless and hurtful; but till then I believe its immediate influence to be a beneficial one, and in the right direction. Therefore do not conclude that a clot is formed, or that bleeding is for that reason useless, till at least twenty-four hours are passed after the fit.

Supposing that a fluid has to be dealt with, you are perhaps anxious to know of what nature it is; and, in point of fact, I find I am constantly asked by students, when they see a case of apoplexy in the wards, whether it is serous or sanguineous apoplexy. I say to you now, what I always say then, that there is no possibility of certainly distinguishing them; and that, fortunately, it is of no importance to either physician or patient to do so, as far as the immediate treatment of the fit is concerned. One, indeed, forms a clot after some time, which we have been just now discussing; and the other remains liquid. But that does not affect the question of the comatose condition now before us. I will speak, then, of "fluid", not distinguishing blood or serum, or bloody serum or serous blood, but clubbing them all, as must be done by practical men, together. When, then, there is fluid compressing the nerve-fibres, I feel sure that there is an influence for good in blood-letting, accompanied, of course, by a danger, as all active treatment is, but still a decided influence for good. It is capable of lessening the force of the heart, which is driving the blood towards the place where it is oozing out either as serum or complete blood, and of diminishing the calibre of the vessels that allow it to pass. The anxious question is, how to secure those advantages without the necessarily accompanying dangers, without adding too great an additional shock to the already shocked nerves, without weakening fatally the already weakened general system.

You will observe, by the example of the patient I have used as my text, that the first effect of an apoplectic seizure is the violent blow to the nervous system above mentioned. The poor woman was damp and cold, and pale as a corpse; the pulse and heart beat quick, and irregularly, and weakly, just like those of an ox stunned by the slaughterer's pole-axe. Had she been bled then, she would certainly have died outright; and moreover, even had she survived, there was no object to be gained by it; for the heart was weak enough, surely. But after a time—seven hours in this instance, sometimes sooner, sometimes later—the heart and pulse recover, and the blood must be driven against the ruptured or oozing vessels with the same force which originally caused them to rupture or ooze. Now is the time to step in with the lancet. You prevent by it what so often happens to apoplectic patients if left alone entirely; you prevent the relapse into coma which frequently follows an apparent partial recovery during reaction; you prevent it in a very intelligible way, by lowering the force of the blood-stream, which the injured vessels have already shown themselves unable to bear. This was the time, and this was the object, of the blood-letting in our patient's case. So complete was the apoplexy, by such a slender thread was she hanging on to life, that I believe the slightest additional extravasation of fluid in the cranium must have been fatal; and to this judicious use of the lancet by our house-surgeon, Mr. Chisholm, I attribute the patient's life.

You will observe the bleeding was not a large one—only eight ounces when reaction first occurred, and eight ounces again in the evening, when the pulse was again getting hard. I mention this to warn you against a mistake into which you might be led by an old and rather questionable maxim, "*Extremis morbis, extrema remedia*". You might be disposed to say, the more the apoplexy, the more the bleeding. Such a notion would be most dangerous. A small bleeding accomplishes the object in view; and a large one can do no more, while it seriously abridges the vital powers. Above all things, don't open the temporal artery; it is nearly equivalent to cutting your patient's throat.

I much prefer, in these cases, venesection to cupping the temples or the nape of the neck, as is sometimes done. What you want to do is to affect the general system, and particularly the centre of circulation—an object which is attained with most rapidity and certainty by opening a vein. You are aiming to prevent blood from being driven into the skull, not to extract that which is already in: at least, if you are striving after the latter result, your anatomy and physiology ought to have taught you better.

The effect of bleeding during the collapse, before reaction has taken place, is, as a rule, sudden death, especially when the heart or its valves are diseased. The effects of *over-bleeding* at a later period are, an excited condition of the circulation, and consequently a more violent impetus against the brain; and at the same time a more watery state of blood, and consequently a greater tendency to serous effusion. As it is impossible to tell whether red blood or serum is exuded in the cranium, you run the greatest possible risk of augmenting the very evil which your injudicious zeal was intended to obviate.

Perhaps you may say, "I am going to bleed my patient again, for the sake of encouraging absorption; and surely absorption of the clot should be aimed at". Now, I am not so sure of that: if it were absorbed sooner than the nerve-fibres were ready to resume their functions, something else must be effused to take its place in the cranium. At all events, I am quite convinced that such absorption is best left to the reviving powers of nature; and you are diminishing these by unnecessarily depriving the body of blood.

In apoplexy and central paralysis, remember that you are dealing with diseases where nature still retains an inherent power of repair: in a moderately healthy constitution, the tendency is to get well. Do not, therefore, attribute all cases of recovery to the means used, unless you can give a probable physiological explanation of their beneficial action; but if you can thus rationally justify your treatment, do not hesitate to feel satisfied with it, whether successful or unsuccessful.

There is no necessity for being idle while you are awaiting the time to bleed. Stimulant injections and purgatives, hot water and mustard-poultices to the feet and legs, a careful arrangement of the clothing and bedding so as to prevent congestion to the head, with keeping up the animal warmth and keeping the friends quiet, will amply occupy your time. It is also conducive to the end you have in view, to shave the head and apply cold lotions to the skull.

After reaction has returned, you will find advantage in the application of ice to the head; it is physiologically correct, and is often a great relief to the patient. You may remember that this poor woman used the first power of speaking that returned to her in begging me to continue the ice: whenever it was applied, it induced sleep, and was most agreeable. What a strange state a person must be in for ice to the head to be agreeable! But so it was.

When, then, you are called in to a case of apoplexy, let these considerations pass through your minds:—

1. Does it depend on destructive softening of the cerebral substance? If so, I must not let anything persuade me to bleed.
2. Has the effusion taken place so long ago as to be, if blood, coagulated? If so, again, I had better abstain.
3. If it be fluid, bleeding is very much to be desired; it may prevent increase of the effusion and relapse.
4. But, to make bleeding most useful and least hurtful, the proper time must be selected; namely, the time when the heart regains its strength.
5. The best guide is the circulation. The sharpness and hardness of the pulse and heart, as felt by you, are a faint picture of the sharpness and hardness of the pulse, as felt by the patient's brain. With your fingers on the wrist, let your mind travel into the interior of the skull.

Illustrations
of
HOSPITAL PRACTICE:
METROPOLITAN AND PROVINCIAL.

BRISTOL ROYAL INFIRMARY.

FIVE CASES OF INTESTINAL PERFORATION.

By Edward L. Fox, M.D., Physician to the Infirmary.

Case i. Joseph Hollier, aged 32, policeman, was admitted into the Royal Infirmary, on July 18th, 1860. Typhoid fever had broken out a short time before in a quarter of the city much inhabited by the police. He had seen one of his brother officers of the force in violent delirium from fever. The symptoms were very slight all through his illness; but from the first moment he was convinced he should die. He was taken ill on July 14th, and died on August 7th.

Many of Peyer's patches were found ulcerated. The cæcum was covered with a very large quantity of circular ulcerations. One of these, about three inches from the valve, had perforated all the coats of the intestine, and fæcal matter had escaped into the cellular tissue behind, but not into the peritoneum.

Case ii. Thomas Hollier, aged 28, policeman, brother of the last patient, had seen several of the police in fever. He was taken ill on September 3rd, 1860, and died on October 14th. There was scarcely any diarrhœa throughout his illness, and the symptoms always seemed slight. He, however, had the same unfortunate conviction that he should die.

There was a little fluid in the abdomen. The coils of small and large intestine were matted together with flakes of yellow lymph. A mass of lymph under the parietal peritoneum just above the sigmoid flexure. About a foot and a half above the ileo-cæcal valve was an ulcerated patch, and another a little lower down. Immediately above the valve was a space, about the size of the top of a stethoscope, entirely covered with ulcers, in which, however, there was no yellow matter, and which seemed to have been in process of repair. Close below the valve, in the colon, was a large ragged ulcerated patch, in which perforation had occurred in two places: in one spot the perforation was as big as a pin's head; in the other, which was close to it, the perforation was as large as a small filbert. These perforations had been closed up by a band of lymph, which was torn across in opening the viscera. There were only two or three ulcers besides in the colon.

Case iii. Mary Ann Wookey, aged 18, was admitted into the Infirmary, on October 11th, 1860. She had just been discharged from the wards as an incurable epileptic; and, during her sojourn there, had occupied a bed next to that of a fever-patient. On admission, she had the coated tongue, abdominal tenderness, and rose-coloured spots of typhoid fever, but there was no diarrhœa. She gradually became convalescent, and was allowed some meat on November 3rd. On November 8th, she suddenly felt great pain over the ascending colon, the abdomen became tympanitic, and she perspired profusely. This condition, accompanied with total constipation and a thready pulse of 132, persisted until the 24th. On that day, the bowels acted of their own accord; and from this time, a slow convalescence commenced, interrupted, however, by several slight renewals of the peritonitis. She was not discharged until February 10th, but had become very fat during the latter part of her illness. The pulse, even at the time of her discharge, remained over 100. The treatment consisted of turpentine fomentations to the abdomen, and opium and gallic acid internally, with some stimulant.

Case iv. Adolph Kruge, aged 21, sailor, was admitted into the Infirmary, on April 24th, 1861, in a dying state. He had come from Havanna, and had been ailing when he left that place. His captain had tried no remedy, except that he had endeavoured to bleed him several times, but without success. The crew had been very short of vegetables, and had had no lemon or lime-juice. The patient had had no diarrhœa during the voyage. On admission, he was found to be a mere skeleton, very filthy, and having his chest and abdomen covered with dark purple spots, not like petechiæ, but suggesting the idea of typhoid spots in a patient with scurvy. The abdomen was very tender. He died on the second day.

The ileum presented two ulcerated patches in its upper part. About eight inches from the valve was a large long patch, in which there were no less than seven perforations—two of large size, the rest very small. Nearer still to the valve were several groups of ulcerated patches, in most of which the ulceration had extended entirely, or almost entirely, to the serous coat. The valve itself was healthy, as was the ascending colon. The rest of the colon as far as the rectum exhibited the appearances seen in acute dysentery; viz., much ecchymosis, with ragged ulceration of the mucous membrane, and a very considerable smearing of thick yellowish mucus.

Case v. James Mills, aged 70, sailor, was admitted into the Infirmary, on November 7th, 1860. He had not been to sea for ten years; had been a drunkard, and had been now ill for eight weeks. His bowels were open twenty times in the twenty-four hours, and the motions were bloody. Under astringents and opium, he seemed at first to improve; but at the end of the month the symptoms recurred, and he died on December 12th.

The small intestines were quite healthy. The large intestine, in its whole extent, was much thickened from inflammatory deposit. The mucous membrane in many places was shreddy, and fell off on being touched, leaving the muscular fibre exposed beneath it. Just under the ileo-cæcal valve, and in several other places along the colon, there were small ecchymoses of blood. In the colon there were five perforations: two of them were round holes, the ulceration having proceeded in a direct line through all the coats: the three others were more oblique, the ulceration having first proceeded through the mucous and muscular coats, and then taken an oblique direction, perforating the serous coat at the distance of an inch or an inch and a half from the original ulcer.

The above cases may illustrate the following points.

1. Mental depression has a most fatal tendency in fever. Both the first cases were fine strong men, well able physically to fight with the disease; and the autopsy of the second showed how little the intestine had suffered.

2. Diarrhœa may be and often is absent, when the ulceration is proceeding even to perforation. In fever, probably the amount of diarrhœa affords little or no evidence of the amount of intestinal mischief.

3. Perforation is by no means necessarily a fatal occurrence. My third case was, without doubt, one of perforation, healed naturally. This mode of natural cure was seen at the autopsy of the second case, in which a band of lymph entirely occluded the orifice of the perforations. The condition, which was found in the first case, may also occasionally render such an occurrence comparatively harmless; the fæcal matter having escaped into the cellular tissue behind the intestine. In this situation, a circumscribed abscess may be formed. I believe my colleague, Dr. William Budd, has seen a case of this kind, in which the abscess opened externally.

4. Typhoid fever and dysentery may coexist.

5. The coexistence of scurvy with typhoid fever may modify the peculiar character of the typhoid eruption.

Original Communications.

ON INCISIONS FOR STRICTURE, COMPARED WITH DILATATION.

By John Gay, F.R.C.S., Surgeon to the Great Northern Hospital, etc.

Perhaps there are few subjects of graver import connected with surgery than stricture and its treatment, seeing that the disease itself is not only most troublesome to the patient, and often most perplexing to the surgeon, but that it is a very constant cause of premature and rapidly supervening death in old persons.

The question of the value of incisions in some forms of obstinate stricture appears to be yet *sub judice*; some able surgeons, amongst them Mr. Henry Smith,* contending that their value is of small account; whilst others, and amongst them Mr. Henry Thompson, recommend them in certain cases, not only as palliative in most, but curative, in its widest sense, in some. I am led to agree very much with Mr. Smith in his estimate of the value of the incision method, compared with other modes of treatment, especially that by dilatation; believing that the advocates of the former found their verdict upon its immediate and transient, rather than upon its ultimate and substantial, results.

Some years since, one of the most justly eminent surgeons of our age proposed external division in certain kinds of permeable stricture. Before that time, surgeons resorted to this course only in cases of impermeable stricture; or as an adjuvant in the treatment of permeable strictures, when complicated with perineal fistulæ. Mr. Syme's judgment and experience led him to propose this operation, or (as it has been called) "the perineal section" as "a simple remedy, and sufficient to accomplish a cure, quickly, safely, and surely" in cases of extremely irritable stricture, or those in which the stricture is so contractile as to resist repeated attempts at dilatation. Coming from such a source, this proposal was received with, as it was entitled to, the greatest respect; and it had not been long enunciated ere it began to be carried into practice somewhat vigorously. But whether the cases chosen for this mode of treatment by all the disciples have been scrupulously such as the master would have approved, is, to say the least of it, questionable; and if, therefore, it has not been attended with the amount of success prognosticated for it, the failure cannot honestly be charged at his door.

The records of this operation, given in Mr. Thompson's excellent work, inform us that the results have been as follows: viz., a large proportion of cures, some failures, and a few deaths.

The *cures*, from the unqualified manner in which they are spoken of, may be supposed to be such, in the Johnsonian sense of the word; but the prevailing opinion (probably as near an approximation to the truth as the statistical evidence by which the contrary view is supported) is that they are not quite "cures", inasmuch as, in the great majority of cases, the patients find the use of the bougie or catheter as much and perseveringly needed after external incision, as after any other mode of primary dilatation; for without it the stricture will as inevitably and invariably return. Perhaps it may be objected that this is but an opinion or impression. I do not see how we are to arrive at a much more satisfactory conclusion; for it would, obviously, be a matter of extreme difficulty to obtain the ultimate results in a number of cases, sufficiently large to form the basis of a practical inference that might be depended upon; whereas it is easy to obtain the immediate, which are, I am persuaded, the most favourable of the two. Cases constantly turn up in the course of practice, which have grievously disappointed the hopes of the patient, over which, at an earlier period after the operation, both patient and operator indulged the most sanguine expectations. I cannot but think, therefore, that the term "cures," in reference to this operation, has been used in somewhat too latitudinarian a spirit; and that, at least in some of the cases thus represented, the patients were only temporarily benefited.

It is true, that Mr. Syme, Mr. Thompson, and other gentlemen, whose statements or motives cannot for a moment be doubted, testify to some instances in which external incision has been followed by a positive and permanent cure of the stricture. The cases in question have been subject to observation for years. But this success is not a feature of this mode of treatment exclusively; for it follows catheterisation as well in some few, and those even of the most severe, cases.

The *deaths* have been computed at six per cent. This, of course, is a correct computation as far as its elements go; but I am inclined to believe, from evidence which it has been my own lot to obtain in the course of my professional duties and intercourse, that the deaths have not been so scrupulously registered as the escapes.

The following case which occurred some few years ago, made a deep impression on my mind; and I narrate it in order to shew that the risk attendant upon external incision is one of the most serious objections to its adoption.

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* See, in "Transactions of Medical Society of London," a paper by Mr. Smith.

A captain in Her Majesty's service, in the prime of life and newly married, consulted me for an old stricture, firm, and exceedingly prone to spasm. I advised the ordinary remedies, with cautious dilatation; and whilst he followed my advice, his stricture ceased to be troublesome. Although, when affected by spasm, the stricture was annoying, I did not consider it a bad case; and I had little doubt but that a perseverence in mild treatment would have cured him as effectually as a more severe course. Mr. Syme's method was just then in the ascendant; and my friend was induced, by earnest solicitation, to try it. He was cut in the most able manner; and, in a very few weeks afterwards, called on me to express his great satisfaction at the treatment and the results, for he felt "assured that it had accomplished an effectual cure." Some months elapsed, and I heard that the captain was dead. He had suffered a relapse of his symptoms; had again submitted to the external division of the stricture; and had died within two or three weeks in consequence of the operation.

Since that occurrence, I have discouraged this mode of treatment, under any but the most exceptional circumstances; such, indeed, as are very rarely met with in conjunction with a urethral stricture.

I believe with Mr. Syme, that a stricture, not of traumatic origin, rarely if ever becomes impenetrable to a skilfully plied bougie or catheter (I invariably use the catheter); and, moreover, that when once passed, the catheter, if its use be steadily and cautiously persisted in, and combined with appropriate general and local treatment, such as leeching, opium, steel, etc., will ensure as complete a cure as can be effected by any other known means.

The advantage of this method over external division is its comparative freedom from risk; and I cannot but regard the argument in its favour as irresistible when we come to reflect that, out of every hundred, according to received tables, on whom division has been practised, six individuals have perished. This rate of mortality would be insignificant if the disease itself were mortal; which is not the case at that period of life in which such a procedure could for a moment be justified; or, perhaps, if there were an equivalent in the number of actual cures, which Mr. Thompson's tables do not, in my opinion, shew. It is true, that strictures do occasionally reach such a pass as to lead their sufferers to "protest that life is no longer desirable"; still, I cannot think that such a protestation, independently of some killing circumstances about the disorder itself, becomes, in any case, an admissible plea for an experiment in the shape of a possibly fatal operation.

It may have been observed that I do not exclude external division from the list of stricture remedies, believing with Mr. Thompson that the real aim of the surgeon should be to "utilise all"; but I do object to that estimate of the operation according to which it is regarded as a simple, safe, and effectual method of cure; and is, in consequence, adopted, as I have much reason to believe it still is by some, without either that regard to necessity, or that amount of caution which should ever be observed when life hangs on the issue.

Of the simple internal incision recommended by Mr. Thompson, I have had no experience; but, when confined to the constricting band or tissue, I can see no objection to it; believing that whilst, on the one hand, it can do no harm, it is very likely, on the other, to relieve congestion, inflammation, or irritability, and efficiently to prepare the way for what, in the end, will still be the "wedge" in the treatment, namely, persistent dilatation.

I come now to speak of dilatation, having long adopted Sir Chas. Bell's view that "the permanent cure of stricture is to be accomplished by dilatation......by such a stretching of the narrow part of the canal, that it grows large under the operation, and has no disposition to contract." (*Institutes of Surgery.*)

I speak from some considerable experience, and that of the treatment of the worst forms of stricture, when I say that I have very rarely met with a case that has not been amenable to the use of the catheter, with such adjuvants as opium, leeches, steel, etc., when especial circumstances demand them.

Space forbids my treating of different kinds of strictures in detail, or their pathology; but it must be remembered that that idea of an urethral structure is miserably imperfect, which reduces it to the simple narrowing of the passage. A stricture is a structural lesion; and is not only the consequence of some disorder of the urethral tissues, but becomes itself the centre, and, perhaps, the seat of disorders specifically its own, such as inflammation, congestion, hæmorrhage, spasm, etc. And it is most constantly the case that the patients suffering from stricture do not become conscious of its existence, or at least do not awake to its importance until their attention is drawn to it by its having called into painful activity one or the other of these accessory forms of disease.

It is not, then, the stricture *per se*, except in urgent cases, that should first claim the surgeon's notice, but its incidental affections; and all mechanical treatment should be withheld until these are brought under control by appropriate management, or, if the delay can be borne, altogether overcome.

The most general causes of failure in the use of the catheter are, as far as I have seen: 1. Its inopportune employment; and 2. Impatience. To the first I have just alluded. With regard to the second, I should say that in no case should the catheter be used with any but the slightest force; and this should not be persisted in but for a very short time. It is better to make several efforts at intervals of one, two, or three days, than overcome the resistance of a stricture by one effort, if that should necessarily be a violent one, and such as would lacerate or do other injury to the urethra. Gentle and regularly repeated efforts will eventually ensure success in, I believe, the most aggravated cases. I am in the habit of observing two rules when attempting to pass a catheter through a stricture, of the greatest service: 1. Invariably to keep the convexity of that part of the catheter between the curve and the point well back against the posterior wall of the urethra, the point being tilted slightly forwards and upward at the same time by a finger commanding the handle side of its curve; bearing in mind the anatomical relation of the urethra to the pubic arch, as it passes through the triangular ligament; and 2. To desire the patient at the same time to make an effort to void his urine, whereby all resistance to the introduction of an instrument, on the part of the extrusor or detrusor muscles of the urethra, is overcome, and a channel, though ever so small, is, of necessity, formed.

In passing, I might remark that this is an invaluable test of the *existence* of stricture, especially in young subjects.

After the catheter has once passed through the stricture, it does not follow that it will be admitted on subsequent attempts. These may fail from many causes, and may fail even again and again; but, after a time, the failures will be less signal, until, at length, they cease altogether.

There should never be a hurry to substitute a larger instrument for one that passes. Sometimes a small instrument will dilate, and that with permanency, more quickly than a large one; although, on many accounts, the latter is preferable to the former in the generality of cases. I am assured that, by the gentle but patient and persistent use of catheters, well adjusted, as far as their size and shape are concerned, to the capacity of the strictured passage, and to the normal or abnormal course of the urethra in its entire length, most strictures can be overcome, and the urethra restored to its original condition, with as much security against relapse as by any other plan of treatment that has hitherto been devised, and with less risk of injury to the patient; and that the call for the knife is exceedingly exceptional.

Finsbury Place South, May 1861.

DOES THE PERICARDIUM INVARIABLY BECOME ADHERENT TO THE HEART AFTER ACUTE PERICARDITIS AND RECOVERY?

By F. Hughes Hewitt, M.D., Physician to the Worcester Dispensary.

The British Medical Journal, for March 16th, contains some remarks by Dr. Hinds, of Birmingham, on this very interesting question. The author thinks it should be answered in the negative. He admits the difficulty of "dealing with it very positively and conclusively," owing chiefly to the rarity of opportunities of examining the bodies of persons who have made recoveries from acute pericarditis. He assumes, correctly I believe, that most pathologists hold with Dr. Watson, that the cessation of the to-and-fro sound is owing, not to absorption of the effused lymph, but to adhesion of the opposed surfaces of inflamed pericardium, and that "in this catalogue of apparent but unreal recoveries many of Bouillaud's cases of 'pericarditis terminating in health' ought to be included." He then relates two cases, occurring in his own practice, with the results of which he thinks "the principle above laid down is not consistent."

The first is the case of a gentleman, aged 27, who exhibited all the symptoms of pericarditis. He was treated by local bleeding, calomel and opium, and diuretics, and in eleven days the friction sound, together with "a little bruit with the first sound of the heart" had completely disappeared. This was three years ago, and the patient "shews not the slightest departure from robust and perfect health."

The second case is that of a child, aged about two years, who died after a few days illness, no heart symptoms having been detected during life. At the autopsy "the heart was found glued to the pericardium throughout its whole surface by a thick toughish layer of recent lymph."

Now, cases such as these are, comparatively speaking, common enough. Every practitioner who has seen much of acute disease must have met with instances of pericarditis in which all the symptoms, general and auscultatory, have disappeared, and apparent recovery has taken place; and others, which have terminated fatally, and in which obliteration of the pericardial cavity from recently effused lymph has been found after death. But what bearing they have upon the question with which Dr. Hinds heads his paper I am at a loss to understand. If his patient who had pericarditis three years ago were to die, and his pericardium were found to be free from adhesions, we should then have something like evidence before us. The grounds, however, upon which Dr. Hinds claims the cure as "complete and real", and arrives at the general conclusion that "pericarditis, with exudation of lymph on the surfaces, is a curable disease, and that in a strict and just sense of the term", appear to be:—

1. That he cannot reconcile the fact that his patient, a *young* man, appears in perfect health three years after an attack of pericarditis, with the idea that adhesion took place at the time of the attack. "If the heart," he asks, "had been glued to the pericardium, could such complete and lasting recovery have occurred? Surely not."

2. That he has never seen, and doubts the existence of, cases of adherent pericardium, "if we except those from recent disease." "Do they ever occur?" he asks. "Has any practitioner seen many, or any, such cases in which the patients, well of the cardiac, have died of some other disease, or even 'apparently' well of the cardiac disease, living in apparent health for any considerable period afterwards?" "I have never myself met with any case of adherent pericardium, except from recent disease."

I must confess that I read these remarks, especially the last sentence, with amazement. How long it has been an established fact that old pericardial adhesion is occasionally met with at *post mortem* examinations, usually quite unexpectedly, I do not know. But many readers of this Journal must remember the discussion which took place some twenty years ago between Drs. Barlow and Chevers as to whether such a pathological condition leads to hypertrophy, or to atrophy, of the muscular tissue of the heart. It has been thought by many physicians, by Dr. Munk among them, that it may be detected with tolerable accuracy during life. Specimens of it are to be found in almost every museum. Dr. Wilks observes (*Pathological Anatomy*, p. 65), "more frequently than this" (partial adhesion) "the heart is found universally adherent to its serous covering; thus, at the beginning of this year we found it three times in one week, *and quite unconnected with the disease of which the patient died*, one indeed being an accident, and another a surgical case." Besides numerous instances in the Pathological Theatre at Guy's Hospital, I have met with two or three in private practice; in one of these, a child aged 9 years, the pericardial adhesion, which was universal and evidently of long standing, was quite a minor feature, death having been caused by the suppuration of a mass of enlarged bronchial glands, which had opened into the œsophagus, and penetrated the pulmonary veins, giving rise to immense and rapidly fatal hæmorrhage.

Chronic adhesion of the pericardium, then, is a condition by no means unfrequently met with, and is compatible with the continuance for a very considerable period, not merely of life, but of tolerable health, with an absence of cardiac symptoms, provided it be not complicated with endocardial disease; in short, "*simple* pericardial adhesion produces no appreciable untoward consequences." (Wilks, *op. cit.*)

As regards the second of the two propositions, already alluded to, with which Dr. Hinds sums up his paper, viz., that pericarditis is a "curable" disease, I will only say that, without denying the *possibility* of the absorption of the effused lymph, I think the evidence he brings forward wholly inadequate. The circumstance that slight and partial adhesions only are sometimes found seems to render it probable that a portion of the exudation, at all events, may be absorbed (supposing that the inflammation in these cases originally involved the whole of the membrane—which is not certain). But we ought, it seems to me, to suspend our judgment on this point till we are in possession of well authenticated cases of patients who have had unequivocal symptoms of pericarditis, who have recovered, have subsequently died, and have been found on inspection, free from pericardial adhesion.

Castor-oil Bread. The difficulty of taking castor-oil, when but a mild effect of it is wanted on the bowels, may be removed by kneading, etc., bread with it, instead of butter or lard. Bread made with it will be found quite as good to the taste, if made with fine castor-oil, or finer than with butter, etc. (*Med. Times.*)

Abstract

OF A PAPER

ON THE MOLECULAR THEORY OF ORGANISATION.

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[*Concluded from page* 580.]

II. The author pointed out in the second place, that these molecules are governed by forces, which induce among them a variety of movements, and cause them to combine in definite ways. This force, which we may call *molecular force*, is altogether independent of cell, nucleus, or other form of structure.

1. He alluded to the well-known molecular movements described by Robert Brown. These vibratile, circular, serpentine, or irregular motions may be observed whenever molecules are suspended in fluids of certain densities, but are too well known to require notice here. They occur altogether independent of organised structures, and must be regarded as in their nature purely physical.

2. The peculiar movements observed in the interior of cells, vegetable or animal, and during the putrefaction of organic matter. The former are seen in the large vegetable cells of the Chara, Valisneria, and Tradescantia, among plants; and those of chyle, the yolk of the egg, and of the salivary cell among animals. The author had frequently watched the formation of the latter in putrid fluids. A scum composed of molecules collects on the surface; gradually several of these unite in minute filaments more or less long, which assume vibratile or serpentine movements. They are then called *vibriones*. It has been much disputed whether this class of molecular motions be physical or vital.

3. The movements which are unquestionably vital that occur in the molecules of the yolk, on the entrance into the ovum of the spermatozoid. Here it cannot be maintained that the results are purely physical, because in different ova we see such widely varying effects from apparently the same cause. Neither can it be attributed to any direct influence of the cell or of its nucleus, the germinal vesicle. For example, an egg is fully maturated in the female organs of generation, and would prove abortive if a spermatozoid did not find its way through the zona pellucida and get among the molecules of the yolk. As soon as it does so, the apparently purposeless Brunonian movements receive a new impulse and direction. Both spermatozoid and germinal vesicle are dissolved among them, and that wonderful phenomenon of the division of the yolk takes place, not by cleavage or other action of the cell-wall or nucleus, but by the separation of the masses into two masses instead of one. This was compared to what is observable in a dense crowd of men, called upon to pass over to the right or left hand in order to settle any disputed question by a majority. At first unusual confusion is communicated to the whole; some hurry in one direction, others in another; but, after a time, there is seen at the margins, where the crowd is least dense, a clear space, which gradually approaches the centre, and at length bisecting the whole, produces a complete segregation of the crowd into two portions. So with the molecules of the yolk in the egg after impregnation; their movements are directed by conditions which did not previously exist, and a stimulus is imparted to them which causes the peculiar result. It is the division and subdivision of the yolk, wholly or in part, which produces the germinal mass out of which the embryo is formed; and this not by any direct influence of the cell or nucleus, but in consequence of a power inherent in the molecules themselves, which was communicated to them for a specific purpose.

4. The peculiar movements so well described by Brücke, Von Wittich, Harless, and especially by Lister, in the pigment-cells of the frog's skin (On the Cutaneous Pigmentary System of the Frog—*Philosophical Transactions*, 1858). These movements occasion the sudden change of colour in the cameleon, in fishes, and numerous other animals. The black pigment-molecules may be diffused throughout the cell or concentrated in a mass, and all kinds of intermediate gradations may exist between diffusion and concentration. The change in colour is owing to these alterations in the molecules, the tint being light when they are concentrated, and dark when they are diffused. Mr. Lister ascertained by experiments that their concentration is caused by exposure to light, by death of the animal, and by sudden section of the nerve going to the skin; while darkness and irritation of the nerve or skin causes diffusion. Sudden amputation of a limb produced at first diffusion, followed by the concentration of death. These movements of the pigment-molecules are peculiarly vital, and altogether independent of the cell-wall or nucleus. The cell-wall is stationary, and acts only as a sac or investing membrane around the moving particles; while the concentration of these about the nucleus is purely accidental, and frequently occurs in other parts of the cell. The author had seen these molecules themselves, as Mr. Lister describes them, streaming out to and returning from the circumference under the influence of the stimuli referred to, where no cell nor nuclear action could be thought of.

5. There are many other kinds of movements which are evidently independent of cells: for example, those of cilia and of spermatozoids. The former are outside cells, and the latter only move when they are liberated from cells. The contractile fibrillæ of muscles are evidently not dependent for their inherent power on cells or other form of structure, but on the square-shaped molecules of which its substance is composed. All these phenomena, therefore, are connected with the mulecules themselves; the force occasioning them is a molecular force, and has nothing to do with preexisting cells or supposed germinal centres, as some have imagined.

Again, the power of combination between these molecules, which, under peculiar conditions, not only move, but so move as to advance towards and press upon each other, that they at length unite and produce higher forms, must also be attributed to a molecular force operating in obedience to fixed laws. Thus it was demonstrated by Newton that, in a sphere, the total attraction resulting from the particular attraction of all its component parts, is, as regards any body drawn towards it, the same as if they had been concentrated at the centre. Hence minute spherical particles, as so many gravitating points, will be drawn towards each other with a force varying inversely as the squares of the distances between their respective centres. The author referred at length to the able descriptions of Mr. Rainey (*Op. cit.* See also papers in the *Microscopical Journal*, 1860) as to the physical laws regulating the formation and disintegration of bodies by molecular attraction and repulsion, as well as to the effects of molecular superposition, showing that the same physical power which leads to the formation of these artificial bodies, when long continued, causes their disintegration and destruction. All these changes occur slowly, and require time; but their contemplation, when regarded as purely physical phenomena, must strike us with surprise, as being closely allied to all our conceptions of the progress of life itself.

Here the author explained that, in making use of the expressions *life* and *vital action*, he was only using terms to indicate phenomena which, in the present state of science, cannot be accounted for by the ordinary laws of physics. Or it might be said that certain actions are directed and governed by conditions which are as yet undetermined, but which, as they only occur in organic, as distinguished from inorganic bodies, constitute vital actions. Not that an organised body is independent of physical forces, but that certain directions are communicated to them, which, as invariably resulting in specific forms or properties, make up the sum of what we call vitality.

Hence, although we see molecules combining in the forms of crystals and nucleated spherules, inasmuch as we have discovered the physical conditions on which they depend, and can produce them artificially, we have no difficulty in classifying these among purely physical phenomena, even when they occur in the interior of animals. But when other molecules unite to form nuclei, cells, and fibres, and these arrange themselves into tissues and organs to produce plants and animals, we are ignorant of the conditions by which these results are brought about—we cannot imitate them artificially, and are content to call them vital. But the fact the author was anxious to point out was this, that so far as observation and research had enabled us to investigate this difficult matter, it would appear that the formations and disintegrations of vegetables and animals, as well as the peculiar properties they exhibit, are essentially connected with the molecular element. Thus, when we investigate the functions of plants and animals—for example, generation, nutrition, secretion, motion, and sensation—we find them all necessarily dependent on the permanent existence and constant formation of molecules.

Thus generation, both in plants and animals, is accomplished by the union of certain molecular particles called the male and female elements of reproduction. Among the *Protophyta*, the conjugation of two cells enables their contents, or the endochrome, to mix together. This endochrome is a mass of coloured molecules, and the union of two such masses constitutes the essential part of the generative act. In the *Cryptogamia*, a vibratile antheroid particle enters a germ-cell, and finds this last filled with a mass of molecules which, on receiving the stimulus it imparts, assumes the power of growth. It is the same among the *Phanerogamia*, when the germ-cell is impregnated by the pollen-tube. In all these cases it is necessary to remember that the protoplasm is a mass of molecules; that a spore is another mass of molecules; that sporules are molecules; that antheroids are only molecules with vibratile appendages; and that the so-called germinal matter of the ovule is also nothing but a mass of molecules. Cell-forms are subsequent processes, and, once produced, may multiply endogenously, by gemmation or cleavage; all that is here contended for is, that the primary form is molecular, and that the force-producing action in it is a molecular force.

In animals, as in vegetables, every primary act of generation is brought about by the agency of molecules. The *Protozoa* entirely consist of mere molecular gelatiniform masses, in which it has never been pretended that a cell-wall or central cell exists. And yet such masses have the power of independent motion, and of multiplying by gemmation. Considerable discussion has occurred as to whether, among *Infusoria*, there is a union of sexes or a conjugation similar to what occurs among the *Protophyta*; but, in either case, it is by molecular fusion that the end is accomplished. In the higher classes of animals there are male elements, consisting of molecules, generally with, but sometimes destitute of, vibratile filaments, and female elements, composed of the yolk within the ovum, containing a germinal vesicle or included cell. Both spermatozoid and germinal vesicle are dissolved in the molecules of the yolk, which then, either wholly or in part, by successive divisions and transformations, constitute a germinal mass out of which the embryo is formed. Here, as in plants, it is necessary to remember that the spermatozoids, the yolk, and the germinal mass, are all composed of molecules, and that these, combining together, form the nuclei, cells, fibres, and membranes, which build up the tissues and organs of the organism. It is not from either the male or the female element that the embryo is formed. The supporters of an exclusive cell-doctrine have endeavoured to show that there is always a direct descent either from the wall of the ovum or from the germinal vesicle as its nucleus. Thus some consider that the vitelline membrane sends in partitions to divide the yolk mechanically. Others have formed the idea that the germinal vesicle bursts, and that its included granules constitute the germs of those cells which subsequently form in the germinal mass. Others, again, suppose that on impregnation the germinal vesicle divides first, and that the molecules of the yolk are attracted round the two centres so formed. But numerous observations had satisfied the author that both spermatozoid and germinal vesicles are simply dissolved among the molecules of the yolk, from the substance of which, stimulated and modified by the mixture so occasioned, the embryo is formed; a view which has further the merit of explaining what is known of the qualities of both parents observable in the offspring. He was only acquainted with one exception to this general law, viz., the development of *Pyrosoma*, recently described by Mr. Huxley, the description of which, however, was incomplete. (*Annals of Natural History*, Jan. 1860, p. 35.) The truth appears to be, that in an analogous manner to that in which the pigment molecules of the skin are stimulated by the access of light to enter into certain vital combinations with one another, so are the molecules of the yolk stimulated by the access of the spermatozoid to produce those other vital combinations that result in a new being. The essential action is not so much connected, as has hitherto been supposed, with the cell-wall or nucleus as with the molecular element of the ovum.

With regard to nutrition; food and all assimilable material must be reduced, in the first instance, to the molecular form, while the fluid from which the blood is prepared, viz., chyle, is essentially molecular. Most of the secretions originate in the effusion of a fluid into the gland-follicle, which becomes molecular, and gives rise to cell-formation. In muscle, the power of contractility is inherently associated with the ultimate molecules of which the fasciculus is composed; and, lastly, the grey matter of the sensory ganglia, and of the brain, which furnishes the conditions necessary for the exercise of secretion, and of even intellect itself, is associated with layers of molecules which are unquestionably active in producing the various modifications of nervous force. These molecules are constant and permanent as an integral part of these tissues, as much as cells or fibres are essential parts of others, and their function is not transitory, but essential to the organs to which they belong.

All these facts point to the conclusion that vital action, so far from being exclusively seated in cells, is also intimately associated with the elementary molecules of the organism.

III. In the third place, the author enunciated the molecular law of growth, which a study of the numerous facts previously referred to had induced him to frame, viz.:—*That the development and growth of organic tissues is primarily owing to the successive formation of histogenetic and histolytic molecules.* It had already been seen that development and growth in animals originate in the molecules of the yolk of the egg, or of a germinal molecular mass formed from it. The author referred to numerous careful researches recognised by scientific men as giving a correct account of the development of various animals and textures. From these it would appear that the first form was molecular; that the molecules united to produce nuclei and cells; that these became disintegrated to produce a secondary mass of molecules; that these again united to form secondary nuclei and cells; and that the same process was repeated more or less often in various developments, until the animal or tissue was formed. This constituted the successive histogenetic and histolytic molecules observable in the process of growth; the former building up, to a certain extent, and the product disintegrating to produce the latter, which, after a time, again rearranged itself, and became histogenetic to form cells or tissues, which, in their turn, broke down and became histolytic. In short, not only development, but growth and secretion, absorption and excretion, were only different names given to histogenetic and histolytic processes, and that these were brought about by formative and disintegrative molecules. As illustrations of this law, the author minutely followed the development of *Ascarix mystax*, as described by Nelson (*Phil. Trans.*, 1850, pl. xxviii, xxix, figs. 59, 68, 70, 78) and the process of nutrition in the human body.

In this, and a vast number of similar observations, it must be evident that a certain series of molecular transformations is necessary for the one which follows it. Thereby is produced a continual elaboration of matter—a constant chemical and morphological series of changes—the exact number and order of which, in the production of organic forms, only requires time and perseverance to discover. Doubtless, various conditions, dynamical, chemical, and vital, must cooperate in producing the result, and they must all influence molecular as well as every other kind of combination. Such considerations and facts must convince us of the error of endeavouring to place the source of special vital action in any particular form or arrangement of organic matter, whether fibre, cell, nucleus, or molecule. Each and all of these elements, the author contended, had their vital endowments, which reoperate on the others. But, inasmuch as the molecular element is the first as well as the last form which organised matter assumes, it must constitute the principal foundation of organisation itself.

The author pointed out that it was not his object, in directing attention to a molecular theory of organisation, to interfere in any way with the well-observed facts on which physiologists have based what has been called the cell-theory of growth. True, this last will require modification, in so far as unknown processes of growth have been hypothetically ascribed to the direct metamorphosis of cell elements. But a cell once formed may produce other cells by buds, by division, or by proliferation, without a new act of generation, in the same manner that many plants and animals do, and this fact comprehends most of the admitted observations having reference to the cell-doctrine. The molecular, therefore, is in no way opposed to a true cell-theory of growth, but constitutes a wider generalisation and a broader basis for its operations. Neither does it give any countenance to the doctrines of equivocal or spontaneous generation. It is not a fortuitous concourse of molecules that can give rise to a plant or animal, but only such a molecular mass as descends from parents, and receives the appropriate stimulus to act in certain directions.

In conclusion, the author remarked that the theory he had endeavoured to establish on histological and physiological grounds, is fully supported by all the known facts of disease and of morbid growths, which further serve to show that pathology, so far from being cellular, is, in truth, molecular.

Reviews and Notices.

ON URINE, URINARY DEPOSITS, AND CALCULI. By LIONEL S. BEALE, M.B., F.R.S. With Eight Lithographic Plates and Numerous Woodcuts. Pp. 433. London: John Churchill. 1861.

THIS new work of Dr. BEALE consists of thirteen lectures, which were first given at his laboratory to a number of medical practitioners. They were afterwards published in the BRITISH MEDICAL JOURNAL in the course of last year, and are therefore familiar to many of our readers. It is not every reader, however, that has the perseverance to follow with attention a course of elaborate disquisitions on a difficult subject, especially when they are presented to him in the necessarily disjointed state inseparable from the exigencies of a weekly issue. We take it, therefore, that we shall be rendering a welcome service to all in placing before them some account of the matter of this book, and in calling attention to its chief points of novelty and interest.

Dr. Beale is a chemist and a microscopist, and he is equally distinguished in both capacities. The pathology of the urine, to be successfully studied, must be studied with the microscope in one hand and the balance and the test-tube in the other. Dr. Beale is consequently peculiarly fitted by the whole tenor of his previous labours to undertake a treatise on urinary disorders; and accordingly we find that there is scarcely a page of the present volume on which he has not left the mark of his multiplied original investigations.

After some preliminary remarks on the method of examining the urine, the first lecture is mostly occupied with the physical characters of the secretion—density, colour, smell, etc.; and closes with a discussion of its reaction. Attention is called to the important difference between a urine alkaline from fixed alkali, and one that is alkaline from carbonate of ammonia. The former may be a wholly physiological condition, depending on a recent meal; whereas the latter is always morbid, and depends on the transformation of urea into carbonate of ammonia, under the influence of mucus or some other animal matter which acts the part of a ferment. The discharge of an ammoniacal urine is always regarded as a sign of cystitis; indeed, the presence of carbonate of ammonia, by irritating the mucous membrane, suffices to light up an inflammation of the bladder. But the present writer has witnessed, in a case of Bright's disease with symptoms of uræmic poisoning, an ammoniacal state of the urine, without cystitis. In this case, the bladder could be completely emptied of its contents in micturition. There was no pain or uneasiness of any sort, and yet the freely voided urine was observed to be strongly ammoniacal for several days before death. It was also noted in the same case, on a *post mortem* examination, that the left ventricle contained a very large, firm, pale yellow clot, which had evidently been formed before death, and had been the immediate cause of it. Some surprise was felt at the discovery of this clot after the evidence, from the state of the urine, of an ammoniacal state of the blood. We commend the fact to Dr. Richardson. It need hardly be added, that the urinary passages were carefully searched for some cause sufficient to account for the state of the urine, but none was discovered.

The second and third lectures and half the fourth are devoted to an exposition of the chemical composition and qualitative and quantitative analysis of the urine in health. This is supplemented with an account of the quantity of the different constituents excreted in twenty-four hours.

Having thus cleared the way, Dr. Beale enters on the consideration of urine in disease, and passes in review the anomalies of the secretion depending on an excess or deficiency of water and the organic and inorganic constituents. This portion of the work is enriched by numerous original analyses of urine in various diseases—chorea, rheumatic fever, mania, epilepsy, paralysis, etc.

In the fifth lecture, the author gives an account of the soluble substances present in urine in disease, which do not exist in the healthy secretion. Dr. Beale's opinion of the clinical significance of albumen in the urine may be gathered from the following observations.

> "If the quantity of albumen be small, amounting to milkiness or opalescence when heat is applied, or nitric acid added to the urine, and especially if the urine be pale and of specific gravity 1012 or lower, we should suspect that the lesion giving rise to the escape of the albumen was chronic, and would ultimately destroy life.
>
> "If the proportion of urea to the other constituents of the solid matter were large, we should form a more favourable opinion than if the percentage in the solid matter were very much less than in health. In the latter case, a great part of the renal structure would probably be involved; but in the former there would be reason to think the disease had only affected a certain number of the secreting tubules. There are, however, some exceptions to these general statements. Patients have passed small quantities of albumen in the urine for many months, and it has afterwards disappeared. In other cases, the progress of the disease is exceedingly slow. I have known a man pass urine of the character above mentioned for upwards of twelve years; and I believe this might go on for twenty years, or even longer, the patient perhaps dying at last of some other malady." (P. 140.)

Relating to the same subject, the following remarks are well worthy the attention of those whom they may concern.

> "It is very important that the medical officers of life-insurances should be aware that there are many instances of persons having chronic disease of the kidney, who are not themselves aware of it. Neither is there in many of these cases anything in the history or the appearance of the person that would cause the physician to suspect the true nature of the case. The discovery of albumen in the urine, or of casts in the deposits, is sometimes the only point which leads the practitioner to a correct knowledge of the doubtful nature of the life. Now if one of these persons experienced a severe attack of catarrh, his life might be endangered; and any exposure to cold would be very likely to set up acute inflammation of the kidneys, already impaired by disease, and thus prove fatal. The only way to discover such a condition is to institute a careful examination of the urine in every case. . . . . We cannot be too cautious in arriving at a prognosis in these cases . . . . and, even with the greatest care, we shall seldom feel justified in expressing any but a very guarded opinion as to the probable duration of life." (P. 141.)

In testing for albumen in urine, Dr. Beale reminds us that, in certain specimens, nitric acid occasions a cloudiness from the precipitation of uric acid or an acid urate, quite independently of albumen. The former may be distinguished from the latter either by boiling, which dissipates the urate, or by the microscope, which reveals crystals of uric acid in it. It is, however, quite easy to tell the difference between them without the aid of either means. If the test-tube containing the urine be held in an inclined position, and the acid allowed to trickle slowly down its sides, the heavier liquid will sink through the urine, and form a distinct layer at the bottom of the tube. If albumen be present, a cloudy zone will be produced *immediately above and in contact with* the nitric acid; but if no albumen exist in it, but an excessive proportion of urates, a cloudy zone will appear *at the surface of the liquid*, while the lower part—that in contact with the nitric acid—will remain perfectly clear.

In his seventh lecture, Dr. Beale proceeds to describe urinary deposits, and adopts a classification which we think objectionable. Here it is:—

> "1. Insoluble matter floating upon the surface of urine, or diffused through it.
>
> "2. Light and flocculent deposits, usually transparent, and occupying considerable volume.
>
> "3. Dense and opaque deposits, occupying considerable bulk.
>
> "4. Granular or crystalline deposits."

In the first division, Dr. Beale places fatty matter alone—in fact, chylous urine; yet he admits that urate of soda is often suspended in a molecular state through the fluid, rendering it turbid; but, as this also forms a deposit, he prefers referring it to the third head. Phosphates also are often found in a pellicle upon the surface of urine; so are uric acid, the amorphous urates, and oxalate of lime. Again, vibrios are always uniformly diffused through the liquid.

Under the second head are ranged epithelial cells, from whatever part of the urinary passages; also vegetations, spermatozoa, and casts of tubes, and benzoic acid.

The third class embraces urates, pus, and phosphates; and the fourth class includes uric acid, oxalate of lime, certain forms of triple phosphates and phosphate of lime, cystine, carbonate of lime, blood-corpuscles, and very rarely cancer-cells, tubercle-corpuscles, and echinococci.

It appears to us that a classification which groups pus with phosphates and urates, and blood-corpuscles with oxalate of lime and uric acid, while it separates the amorphous from the crystalline phosphates, and uric acid from the amorphous urates, is evidently faulty, and likely to lead to misconception regarding the real relations and conditions of origin of urinary deposits. The physical properties of these deposits are frequently of great value to the practised eye in enabling the practitioner to discriminate deposits rapidly, without resorting to the use of the microscope; but they do not suffice for the purpose of classification, because the same substance varies greatly in its appearance in different instances, according to the aggregation of its particles and the density of the urine through which it falls.

In the eighth lecture, a copious and interesting account is given of chylous urine. The conclusion arrived at, after a consideration of all the cases of this curious condition yet published, is contained in the following paragraph.

> "Upon reviewing the chief points in this and other cases, one is led to conclude that the condition does not depend upon any permanent *morbid* change in the secreting structure of the kidney, and that the chylous character of the urine is intimately connected with the absorption of chyle. The debility and emaciation show that the fatty matter, albumen, and other nutritive substances, are diverted from their proper course, and removed in the urine, instead of being appropriated to the nutrition of the system. Whether these materials are separated from the blood by the kidneys, or find their way to these organs by some more direct course, cannot now be decided." (P. 244.)

Respecting the clinical significance of oxalate of lime in urine, we are persuaded that practical men who have paid attention to this point will agree in the following remarks of Dr. Beale, and repudiate as romances the views held and promulgated by Dr. Bird.

> ". . . . The presence of oxalate of lime in the urine affords us but little help in the diagnosis of the case. It is often discovered in almost opposite conditions. Thus it is sometimes present in poor broken-down subjects, and it is found in the urine of well-to-do country gentlemen. It will appear when we live too well and take too little exercise. It is common in chronic pulmonary affections, as bronchitis; and it is often observed in old cases of emphysema. It is common enough in dyspeptics, and is usually met with in cases of jaundice. In various forms of general debility, in cases of over-fatigue, and in men who have overworked their minds, it is perhaps the commonest urinary deposit. Lastly, I have found it many times, and in very large quantity, in the urine of men who appear in all other respects in perfect health." (P. 308.)

In the ninth, tenth, and eleventh lectures, the various substances which occur as urinary sediments are severally considered in succession; and, in the twelfth lecture, Dr. Beale supplies an admirable account of the chemical composition, history, and origin of urinary calculi. On this latter point Dr. Beale communicates some novel facts. He has frequently found *microscopic calculi* in urine; and these, he reasonably thinks, form the nuclei of larger concretions when the calculous tendency goes on to the production of stone in the kidney or bladder.

> "It is not at all uncommon to meet with microscopic uric acid calculi—aggregations consisting of uric acid crystals, which, if retained, might receive deposits of fresh material on the outside, until the small calculi, varying in size from a mustard-seed to that of a pea or larger, are formed. Microscopical calculi of phosphate of lime are by no means uncommon, and are often found in the kidney; but until lately I have never had an opportunity of watching the formation of calculi composed of oxalate of lime. The nucleus of these calculi does not consist of mucus or epithelium, as in the phosphatic calculus; but is of the same composition as the exterior. Fig. 54 represents a mass of dumb-bell crystals, many of which collections were passed in the urine. Although the mass is seen to consist of a number of distinct crystals, these are firmly attached, so that the whole may be rolled over and over without the individual crystals being separated from each other. Such collections I have many times seen in the uriniferous tubes in kidneys obtained from *post mortem* examinations, which leaves no doubt as to the precise seat of formation of these bodies. Gradually the interstices between the individual crystals become filled up with the same material, and at the same time a few of the larger crystals increase in size at the expense of the small ones. At length a small crystalline mass, of an oval form, is developed, which clearly consists of a microscopic mulberry calculus, and, if retained, will gradually increase in size. When such calculi reach the pelvis of the kidney, a few sometimes increase gradually by the deposition of oxalate of lime on their exterior; while, no doubt, the greater number escape with the urine, and give no trouble." (P. 352.)

Dr. Beale's observations have led him to conclude that these microscopic oxalate of lime calculi are not only the point of origin of mulberry concretions, but also of the greater number of uric acid calculi. He has found many small uric acid calculi, which appeared to be entirely composed of this substance, to possess a nucleus composed of oxalate of lime; and not unfrequently, by the action of liquor potassæ, well-defined dumb-bell crystals could be obtained. These were insoluble in potash, and also in acetic acid. From some recent analyses made by him, he has come to the conclusion that the dumb-bell crystals form the nucleus around which the uric acid is deposited, more frequently than any other substance.

The concluding lecture is devoted to a description of the volumetric process for estimating some of the constituents of the urine. Plain directions are given for the preparation of the standard solutions, and for providing the necessary apparatus, as well as the method of using them.

After a careful perusal of Dr. Beale's work, we are satisfied that, whether for its thoroughly practical and experimental tendency, or for the completeness and erudition of its articles, it stands second to no treatise on the subject in the language. The body of the work is freely illustrated with woodcuts; and seven lithographic plates are added, for the delineation of the various implements of glass and metal required in detecting and separating the urinary constituents, or in estimating their quantity volumetrically.

A New and Rational Explanation of the Diseases Peculiar to Infants and Mothers. By Thomas Ballard, M.R.C.S.E. London: 1861.

There is a good deal of merit ascribable to the author of this book. However much we may differ from him in certain of his conclusions, we are bound to admit that he has laboured honestly and carefully in working them out. In fact, his book is clearly not a mere compilation. What he has given, is given from his own experience.

The proposition which Mr. Ballard maintains is this—that the exercise of the instinctive act of sucking, "under circumstances unfavourable to the infant obtaining food, is a principal source of disease to infants and puerperal women". That he has here laid down a sweeping and over absolute proposition, and that he has not proved his case, is to us very certain.

In his chapter on the morbid effects of fruitless sucking of infants, he has too rashly seized upon an asserted physiological fact as the basis of his argument. This is how he argues: Whenever a child performs the act of sucking, although it suck nothing, its juices—salivary, gastric, bilious, and pancreatic—are all abundantly secreted; and being secreted, and having no proper matters on which to exercise their virtues, they fall foul of the tissues of the stomach and intestines, and erode, and soften, and waste them away. And then we have green stools, and gripings, and a series of those kinds of disorders which are usually attributed to teething. But surely all these disorders—green stools, etc.—occur when children suck, and suck effectually! And surely the fact of the pouring out of gastric and bilious, etc., secretions into the empty stomach, under the circumstances supposed, has yet to be proved; and surely the *wasting* of the coats of the stomach and intestines is an ordinary associate of all wasting and starving diseases.

With regard to the cause of puerperal fevers, we will give Mr. Ballard's views, and refer the reader, who may be curious to see how they are fully worked out, to the book itself.

> "Excessive irritation of the breasts from the endeavour to obtain milk, either before it is secreted, or in greater abundance than they can yield, is the one common origin to which all puerperal diseases may be referred."

The series of causes and effects run thus: the breast is irritated, the womb sympathetically disturbed; then come after-pains and abnormal contractions of it; then rigor; then the development of the disease.

Another proposition is, that light is the only cause of purulent ophthalmia of infants; and, if it be accepted, the following simple treatment will save the practitioner a world of trouble; viz., "the applying a piece of green calico to the window of the room in which the child sleeps during the daytime". We suppose we may draw, as a corollary from this proposition, that infants who are not exposed to the light never have purulent ophthalmia. Can Mr. Ballard really mean this?

As we have already said, in the instances we have given, as in other propositions laid down, Mr. Ballard, in our opinion, splits on the too exclusive rock—a too frequent way of injuring their craft by medical men. We nevertheless can recommend his book to the perusal of our brethren. They will find instruction in it, even although they may refuse to admit its writer's views—at least, in his absolute mode of putting them.

Dr. Jenner's Volunteer. Mr. T. H. Macguire, the painter of this picture, thus writes of it in a daily journal:—"In your criticism of the Royal Academy, the subject of my picture, No. 589, 'Dr. Jenner's Volunteer', was entirely misunderstood, from the fact of the quotation sent with it to the exhibition not having been inserted in the first edition of the catalogue. The quotation in question (selected from Dr. Baron's *Life of Jenner*) was a letter from Dr. Jenner to a friend, explaining how James Phipps, a boy eight years of age, volunteered to be experimented upon; and my picture was painted to illustrate the first step taken in perhaps the most valuable discovery in medical science. The subject was suggested to me by Professor Owen. The figure of the Doctor is a portrait, and the principal features of the interior of the cottage, painted on the spot where the event took place (at Berkeley, in Gloucestershire). Although not so much thought of in England, the 14th of May is held as an annual festival in Berlin, to commemorate the day on which Dr. Jenner made this experiment."

Readings in Classical Medicine.

I.—THE BRUNONIAN THEORY.

[John Brown, the author of the famous Brunonian system, was born in the year 1736, at Buncle, in the county of Berwick. He was educated at Dunse, the same place, whence came Duns Scotus, sometimes called the "subtle doctor." The parents of Brown put him first to a weaver as an apprentice; but he rejected the position, and, it is said, went himself as a reaper to get the means wherewith to pay for his education. He remained at the grammar school at Dunse until 1755; when his reputation as a scholar procured him the appointment of tutor in a family of distinction; thence, after a short time, he went to Edinburgh. Resigning the study of divinity in 1759, he commenced to study physic and to grind in classics. In 1765 he married, and opened a boarding-house and academy for students of medicine. The design succeeded; and Brown, for a time, became the *protégé* of Cullen, afterwards to feel the sting of his patron's condescension. Quarreling with Cullen, he published speedily his new theory of physic in the *Elementa Medicinæ*. He took his degree at St. Andrew's; and in 1776 was made president of the Medical Society of Edinburgh. In 1764, he instituted a freemasons' lodge, under the title, "The Lodge of the Roman Eagle." At last he became so embarrassed in Edinburgh that he was committed to prison, whither his students actually followed him to attend his lectures. Obtaining his freedom, he next made his way to London; here he tried to conduct a course of lectures, but failed; and published his *Observations*, which failed also. On October 7th, 1788, being then 52 years of age, he died of apoplexy in his bed, after having taken a dose of opium, to the use of which he was much addicted.

In figure Brown was held to realise Sancho Panza. He was excessively broad, with enormous features, and a crimson complexion; his voice was hoarse and croaking; and his dialect so marked as to render him scarcely intelligible to Englishmen. He was addicted to the use of intoxicating substances to such an extent that, it is said, he would enter the lecture-room with a bottle of whiskey in one hand and a phial of laudanum in the other. Out of these materials he would concoct a draught, under which he commenced his exordium; for a time he was flat, but in a little time worked himself into fever-heat, and declaimed, or demonstrated, or argued, in a virtual frenzy.

With all his faults, he was a man of principle, and died so as to excite our pity rather than our scorn. One who knew him well thus spoke of him: "He was possessed of a great mind that supported him in all his distresses. He despised riches, detested everything base, and possessed such openness of heart as to be liable to be taken in by every knave."

Brown left two sons and four daughters; one of the sons was educated in medicine.]

The Brunonian System was one of those strange conceits by which medicine has at various times allied herself to metaphysical conspiracies against the simple observation of nature. It was a system peculiarly characteristic of the age in which its author flourished. At that time Hippocrates was ignored; and all that high class empirical observation on which Hippocrates made himself so great was well nigh snubbed out. At the same time, there was no experimental learning, either to correct, to advance, or to suggest. Men, therefore, framed hypotheses out of their minds, as they might frame poems or plays; and, as they made it a preliminary to lay down absolute premises, and to argue upon them, the results were usually logical on the premises.

In the absence of anything better in medicine, systems such as those described became extraordinarily popular; and as there never was any very great labour required to confute them, their popularity was not a little increased by the roughing they obtained through opponents. Poor Brown, consequently, secured an enormous popularity, and therewith more kicks than halfpence by many odds. In return, his temper soured by strife, he toppled off his stilts altogether, and let himself down to language which would have ruined Alexander the Great, even when he sighed for another world to conquer it. Speaking of Cullen, for example, Brown gives vent to the following virulences:—

"This brat, the feeble half-vital, semi-production of frenzy; the starveling of strained systematic dulness; the forlorn outcast of the fostering care to which it owed its insect vitality, was now to be pampered by a crude and indigestible nutriture, collected from all the materials which had composed the several fabrications of former erroneous systems, was to be decorated with every foreign plumage, and in this its totally borrowed and heterogeneous form, instead of the hideous caricatura which it was, contrived to excite the derision of mankind, it was to be ostentatiously obtruded upon the world as a new and respectable doctrine, and held up, forsooth, as the rival of a splendid system."

We have paused for breath; let us proceed. Let us observe what was the splendid system which "the starveling of strained systematic dulness," Cullen, aimed to oppose. The principles of the system are delivered in outline by Beddoes, and a most correct outline it is. We give it entire, as embracing the fundamental propositions of the Brunonian doctrine.

The Brunonian Propositions. It is presumed, as a preliminary fact, that it is the business of anatomy to explain the varied structure of organised beings. Consciousness, assisted by common observation, will distinguish animated from inanimate bodies, with precision more than sufficient for all the ends of medicine. The cause of gravitation has been left unexplored by all prudent philosophers; and Brown, avoiding all disquisition concerning the cause of *vitality*, confines himself to the phenomena which this great moving principle in nature may be observed to produce. His general propositions may be thus comprised:—

I. To every animated being is allotted a certain portion only of the quality or principle on which the phenomena of life depend. This principle is denominated *excitability*.

II. The excitability varies in different animals, and in the same animal at different times. As it is more intense, the animal is more vivacious, or more susceptible of the action of exciting powers.

III. Exciting powers may be referred to two classes: 1. External, as heat, food, wine, poisons, contagions, the blood, secreted fluids, and air; 2. Internal, as the functions of the body itself, muscular exertion, thinking, emotion, and passion.

IV. *Life is a forced state.* If the exciting powers be withdrawn, death ensues as certainly as when the excitability is gone.

V. The excitement may be too great, too small, or in just measure.

VI. By too great excitement, weakness is induced, because the excitability becomes defective; this is indirect debility. When the exciting powers or stimulants are withheld, weakness is induced; and this is direct debility. Here the excitability is in excess.

VII. Every power that acts on the living frame is a stimulant, or produces excitement by expending excitability. Thus, although a person accustomed to animal diet may grow weak if he live upon vegetables, still the vegetable diet can only be considered as producing an effect, the same in kind with animals, though inferior in degree. Whatever powers, therefore, we imagine, and however they vary from such as are habitually applied to produce new excitement, they can only weaken the system by urging it into too much motion or suffering it to sink into languor.

VIII. Excitability is seated in the medullary portion of the nerves, and in the muscles. As soon as it is anywhere affected, it is immediately affected everywhere. Nor is the excitement ever increased in a part while it is generally diminished in the system; in other words, different parts can never be in opposite states of excitement.

The above eight clauses include, in brief terms, the whole of the Brunonian system. The modern student will read of it as a grand mystification, and will hear even with incredulity the amount of belief which it excited. Yet it is the fact, that the system did make, for a time, vast progress, and left, moreover, an impression which is to this day not entirely eradicated. Orally, the doctrine found its way through the length and breadth of Great Britain. In America, the famous Rush advanced Brunonian arguments; and professors, practitioners, and students, adopted them. The *Elementa Medicinæ* were translated on the continent in nearly every country. Rasori, towards the close of the last century, in an introduction to a translated copy of the work, published at Pavia, affirms that, in the University of Pavia, undoubtedly one of the first in Europe, there was hardly a student endowed with talents who was not a Brunonian; and that some of the most respectable professors held the author of the system in high estimation. In a word, it is well nigh impossible in this day to form a comprehension of the immediate and extended influence excited by the writings of Brown in professional thought and opinion.

Brunonian Practice. Did the Brunonian theory exert any force in practice? We may answer this safely in the affirmative. It took in this direction immense power, and, perhaps, it exercised that power to a good end. Had the theory, in fact, been universally accepted, and had it retained that supremacy which it at first took, we had heard little now in the way of novelty of the stimulating treatment of disease. Our modern stimulators would have had nothing novel to advance, and nothing critically onerous to bear. For the Brunonian system, not exclusively indeed, but to the largest possible extent, was the stimulating treatment of disease. We derive, from a tabulated history of the doctrine, drawn up by one of Brown's pupils and dedicated to the master, that apoplexy, plague, palsy, malignant fever, gangrenous cynanche, confluent small-pox, hydrothorax, phthisis, contagious dysentery, intermittents, colic, dyspepsia, hypochondriasis, hysteria, epistaxis, menorrhœa, amenorrhœa, rheumatalgia, cholera, epilepsy, chorea, rickets, hæmoptysis, scrofula, typhus, gout, tetanus, scurvy, diabetes, dropsy, and jaundice, are each and every one to be treated by supporting or increasing the excitement, by the administration of stimuli; such stimuli as electricity, opium, ether, spirituous liquors, wine, musk, cinchona bark, snake-root, camphor, and rich soups, being advanced as the remedies.

There were named, at the same time, other diseases of the true sthenic and pyrexial type, in which it was recommended cautiously to reduce excitement; so that the extreme charge often urged against Brown, that his teachings promoted intemperance, is not entirely correct or fair. Beddoes, addressing himself specially to this point, says, in defence of Brown, that no writer insisted so much upon the dependence of life on external causes, or so strongly stated the inevitable consequences of excess. "It may be said," he continues, "that the author's life disproves the justness of this representation; his life, however, only shows the superior power of other causes, and of bad habits in particular. But, though the principles of the system in question did not correct the propensities of its inventor, it does not follow that they tend to produce the same propensities in others."

Some curious anecdotes are told concerning the introduction of the Brunonian principles in the treatment of disease. A student of medicine died of a low fever, in spite of the full and avowed use of diffusible stimulants. The body was opened in the presence of Brown, who remarked that the tissues were unusually fresh. The surgeon who was conducting the *post mortem* examination replied that, considering the circumstances, he had never seen an instance where putrefaction had made such little progress; to which Brown rejoined, "Then, gentlemen, I appeal to you if we may not consider this as a clear proof of the propriety of our practice."

On another occasion, he seized an opportunity to give his system demonstration in a singular fashion. He was suffering from an attack of gout; and after taking a spirituous dram in the morning, he called together half a dozen of his pupils to dinner in the after part of the day, and drank then until he was considerably affected by his potations. He explained that he had intentionally brought on himself a degree of intoxication, in order to show to his auditors how certain inflammations which were believed to depend on the phlogistic diathesis were best treated. For instance, before he commenced to take the stimulus, he had not been able to put his inflamed foot to the ground; but before he dismissed his company, he had recovered the perfect use of his affected member.

In the general application of his system, it does not seem that Brown himself ever had the opportunity of taking an active share; inasmuch as his chances as a practitioner in Edinburgh were destroyed by the rumour of a clandestine attempt on his part to treat a student named Isaacson by his own peculiar plan, while yet the youth was under the care of Drs. Duncan and Monro. It is asserted that Brown saw the nurse who attended on Isaacson, and offered her a bribe to conduct the treatment he would suggest privately. It is further asserted that one Dr. Jones, a friend of Isaacson, was in collusion with Brown, and did actually administer to the patient diffusible stimulants on the Brunonian plan. Anyway, Isaacson recovered; and then the Brunonians, elated with the fact, pointed to him as one whom they, in spite of the attendant physicians, had rescued from the grave. The success to Brown was but a flash in the pan; for the facts and circumstances that were brought out thereupon, damned him for ever as a trustworthy practitioner.

Shall we attempt to analyse the Brunonian doctrine; and out of the multiplicity of its propositions, explanations, and definitions, endeavour to extract the grain of truth which it may contain? If so, let the analysis be brief, and the determination direct. The Brunonian system was false, because it was based on an erroneous induction. It rested, from beginning to end, on forged premises; it overlooked phenomena; and it connected results with nothing antecedent to them that could be considered either tangible or causative. It assumed for the body, as extant in it, a governing principle, which, for sake of words, it designated excitability; yet it confessed not to know what excitability is, or in what manner it is affected by the exciting powers. It took no note of the specific causes of individual disorders; but grouped together, in the most curious array, disorders which, to many now, and to all at one time, were absolutely and unmistakably distinct.

Nevertheless, the Brunonian system, with all its faults and falseness, has in it one distinct ray of truth. The ray is accidentally present, but still present. We said that the classification of disease in this system is curious; and so it is, because, while it is a classification arrived at, or guessed at, as if by an astrological formula, it is in the main correct. To put epilepsy, chorea, tetanus, and phthisis, under the same general head as asthenic disorders; to distinguish a difference between mild and malignant small-pox; to determine a distinction between acute rheumatic fever and those neuralgic affections known as rheumatalgia; in a word, to put into two great groups the diseases of the body with the precision of a modern nosologist; and all this on a purely hypothetical and fanciful premise, implies, to our minds, a singularity of intellect, and a poetical glimpse over a world of facts amounting nearly to the happy and ready comprehension of those who have glanced beyond all detailed laws, and, at one stroke of the pen, have reduced an arithmetical volume into an algebraical line.

In time, as knowledge, derived from an induction through which the mind shall ascend from the appreciation of particular parts to a conception of a unity, shall be amassed, a system may be originated which shall make the dream of the Scottish enthusiast a reality; yet were his system not less false, even then, as a system.

British Medical Journal.

SATURDAY, JUNE 8th, 1861.

THE CÆSAREAN OPERATION: ITS SCIENTIFIC ASPECT.

Many of our readers are probably aware that a discussion, which has excited considerable interest in France, has lately taken place in the French Academy of Medicine, the subject being the performance of the Cæsarean operation after the supposed death of the mother; or, to use modern scientific phraseology, *post mortem* hysterotomy. The discussion of this question has, unfortunately, a religious, as well as a scientific bearing, and hence Medici and Clerici are not altogether at one in the matter. M. Devergie has given an excellent statement of the facts of the case; and a summary of his report to the Academy will, we think, be found worthy of attention.

All facts go to show that the operation is much less frequently practised at present than it was in former times; the reason of this being, that the art and practice of midwifery having improved, fewer women now die after childbirth in the hands of the doctor. Besides, adds M. Devergie, "religious zeal is notably diminished"; and the question has been taken out of ecclesiastical hands by the Civil Code, legal measures having been adopted for its regulation.

The points, according to M. Devergie, which require settlement are—the question of legislation as affecting the operator, and the question of medical responsibility—the question of conscience. M. Depaul, one of the learned debaters of the matter, considered that the Academy was incompetent to deal with these points; but this M. Devergie would not allow. The Academy, he says, was not established merely for the sake of raising up a learned body; but for the purpose of investigating every matter connected with the practice of medicine; in fact, the magistrate has often applied to the Academy for aid in the elucidation of difficult questions of medical jurisprudence—a compliment, by the way, which, we believe, has never been paid to our own defective Academy of Berners Street—probably because it was not merited.

There is no doubt, M. Devergie suggests, that a faulty interpretation of the law affecting *post mortem* examinations has been given by certain academicians. The Legislature never intended to introduce the slightest obstacle to the performance of operations practised for the purpose of saving life; and, therefore, says the reporter, the first paragraph of the conclusions arrived at by the Commission appointed to investigate the question is fully justified, namely: The law, as it at present stands, fully protects the professional rights of the medical man in reference to the duties he may have to perform on the body of a woman who has died *enceinte*; it places no obstacle in the way of his practising hysterotomy in such case, provided the condition of the mother and the child justify the performance of the operation. But, of course, in so doing, he must be careful not to subject himself to the penalty and pains which the law has laid down for the punishment of those who, by negligence, imprudence, or inattention, injure their patient.

M. Lafargue and M. Kergaradec spoke of the *duties and obligations*, which compel the medical man to perform the operation; but these words M. Devergie energetically condemns:—

> "I only recognise *conscience*," he says, "as capable of obliging a medical man to act in a particular manner—to write such or such prescription, or perform this or that operation—conscience guided by the precepts of science applied to the preservation of life. No other consideration must intervene to influence his decision."

The first point, then, which the medical man has to determine, in order to guard himself against the penalties of the Civil Code, is the certitude of the death of the woman *enceinte*. And the difficulty of this is great.

If the woman, though apparently dead, be actually still living when the operation is performed, the operator is liable to the penalty laid down by law. Then, on the other hand, it is not always easy to determine the fact of death under such circumstances. It is true that, when the medical man has been in attendance on the patient during her last hours, he may have noted a series of phenomena, which, taken together, give him a certitude of death. But when he is called in, for the first time, only a few minutes after the death of the woman, when neither cadaveric rigidity, nor the absence of muscular contractions under the influence of stimulants, are to be noted; then the only sign from which he can judge is complete cessation of the heart's beat; and how many medical men are there who can pretend to acuteness of hearing, such as would give the certainty of the fact that the heart had ceased to beat? Consider the peculiar conditions under which such an examination must be made—in the midst of family grief, etc.; and remember that the accoucheur who has lost his patient, is not in the most favourable mood to practise auscultation.

Thus, then, the urgency of the operation being admitted, for the sake of saving the life of the child, the operator is, at the very onset, met with difficulties. He has to satisfy his conscience, and avoid the risk of legal penalty for committing homicide by imprudence. Then, again, the opinions of the family may differ. The husband is favourable, and the mother and sisters opposed to the operation. And, besides, remember how difficult it is, often, to decide whether the child is dead or alive.

When, indeed, we consider the many difficulties which surround the operation of hysterotomy, we may be surprised that it is ever practised at all. The medical man, however, has never been known to consult his personal interests when human life was to be saved; and it is from this point of view that the Commission has arrived at the second paragraph of its conclusion, viz.:—

> "The medical man who believes that he can extract from the dead body of a woman a child having the conditions necessary for extra-uterine life, may and ought, *medically speaking*, to practise the Cæsarean operation, duly observing the precepts of science and the rules of surgery. He must not, however, perform the operation without having acquired a certainty of the woman's death, nor, when possible, without having obtained the assistance of a professional brother."

The Commission has avoided fixing any special term of the fœtal life as proper for the operation—either four, or five, or six months, as some authors have done. It also, by the words "observing the rules of surgery", indicates that the operation is only to be performed by the hand of a medical man. The Commission advises that *confrères* should be called in, because thereby alone can the operator protect himself in respect of responsibility. Waste of time and other inconvenience may thereby result; but then we must remember that the medical man has to deal with the possible life of a mother, which he may destroy; and with that of a child, which he may perchance save.

> "*Legally* speaking—and this is the only point of view from which the Academy should consider the matter—the mother belongs to society; the law owes her complete protection; and if either life should be preserved, it is that of the mother. *Morally* speaking, the life of the child is of the highest interest; but its existence is

problematical, whilst that of the mother has been already proved by long years of life. If, therefore, there be the smallest doubt, it must be given in favour of the mother."

The operator, then, has two questions to decide: Is the death of the mother certain? and, Is the life of the child certain? Assisted by the advice of professional brethren when possible, or acting alone when this cannot be had, and having fulfilled the above conditions, the operator need not hesitate. Even if he commit an error, he is not responsible; because he has, in such case, acted according to his conscience and the precepts of his art.

With regard to the period after death within which the operation should be performed, M. Devergie considers that much latitude should be permitted. M. Depaul has fixed the term at one hour, having accepted it as true that the child ceases to live ten or fifteen minutes after the death of the mother. Judging from the records of the past, M. Devergie considers this limit too restricted. We are, he says, perhaps inclined to hold the past too cheaply; and, although we undoubtedly observe more correctly and scientifically at present than our predecessors did, we have nevertheless no right to reject the well-related facts of former days. M. Devilliers has presented a table to the Academy containing seventy-nine cases of *post mortem* hysterotomy, practised at periods varying between a few minutes and forty-eight hours after the death of the mother. The Commission, therefore, did not think it well to fix any period for the operation; but M. Depaul was of opinion that the operation before the hundred and eightieth day of parturition was not a matter for scientific consideration, and could only be of interest in a religious point of view. He did not, indeed, think the operation could be wisely and reasonably performed before the end of the fourth month, and only exceptionally between the fourth and six months.

From the above it will be seen that the French Academy decline to consider this operation from a religious point of view, although it was for the purpose of obtaining from the Academy a declaration in that sense that the matter was there introduced by Dr. Kergaradec. A *curé* in Brittany had, it appears, called in a veterinary surgeon and ordered him to perform hysterotomy. Dr. Kergaradec desired that the Academy should give its sanction to the performance of the operation in all like cases, by any person whatever, under the circumstances of the case—the urgency of baptism being above all minor considerations. But this, as we have seen, the Academy refuse to do. They have, indeed, judged the matter precisely as we have judged it here.

Certainly enough, it appears from the discussion that it is still a moot point among the body ecclesiastic what an effective baptism is under such circumstances. Several academicians gave their own experience hereon. Dr. Hazard stated that, in a case of the kind inferred, which came under his own observation, the *curé*,

> "Thinking that God, to save a soul, would not require the material performance of all the prescribed formalities proper in baptism, did not hesitate in baptising the child through the belly of its mother. This was done in 1820, and received the sanction of the Bishop of Versailles."

This curious side of the question is thus summed up by M. Devergie:

> "The question of baptism is doubtless one of great importance; and it has already been solved by the doctors of the Sorbonne, when they were consulted as to the possibility of conferring the rite of baptism by aid of an instrument invented by Dr. Bruhier. Their decision is reported at length in Deventer's work. 'The Council', it is said, 'consider that the means proposed may be made use of, in the assurance which they feel that God has not left these infants without help.' Let us hope", adds M. Devergie, "that theologians will accept these new doctrines, which forbid the doctor and the ecclesiastic, placed between the civil law and religious dogmata, to compromise the life of a woman in order to save the life of a child whose existence is problematical."

PROFESSIONAL PROMOTION OF HOMŒOPATHY.

In casting an eye through the pages of a contemporary, our attention was arrested by a letter headed "Consultations with Homœopaths", and ending with a reference to the gospel of St. Matthew. Such an exordium and such a peroration, naturally led us to suspect that the connecting link—the substance of the letter—must contain some proposition of an equivocal character. And so, indeed, it did. It defended the assembling together, *under certain restrictive conditions*, of the medical man and the homœopath in the sick chamber. Or at all events, it gave the quack permission to hang about the skirts of the doctor.

That such a proposition should find an anonymous defender in the profession need be no matter of surprise, when we consider how many members of it there are of high standing—we mean of large practice—who actually and daily thus carry on business with the homœopaths. We should not have alluded to the circumstance, indeed, had not the editor of the journal in which the letter appeared—the *Medical Times and Gazette*—devoted a leading article to the subject, and therein given his modified adhesion to the aforesaid proposition; viz., that there are occasions when these two opposing things—medicine and homœopathy—may be honourably brought into demi-conjunction. The *Medical Times and Gazette*, moreover, blames the Manchester Medico-Ethical Society for having lately acted vigorously in a matter of this nature.

Now, we have no doubt that our cotemporary has taken a view of the case which will not bear close questioning; and it is especially unfortunate that he has done so at this moment, when there is evidently a tendency to an increase of that laxity in principle, which we, as well as that journal, have so often denounced, and which is involved in the professional communing of surgeon or physician with homœopath. We believe, indeed, as far as we can read how the wind blows in this matter, that things are coming to such a pass that men must speak out honestly and openly—either boldly asserting the one thing or the other, that they will or will not meet homœopaths in consultation. We all know quite well, in our consciences, that refusing to meet a homœopath in consultation is a question with which morality and humanity have nothing whatever to do; it is all very well for those who practise the thing to play off these high-sounding terms in order to cover their blushes; but—bosh apart—we know right well that the whole question is one simply of money.

We are not going to enter into any hair-quarterings in the matter, nor to endeavour by discussion to find out what are the particular cases which must be treated exceptionally, and which are of the nature to require this conjunction of physic and quackery. We will leave these fine points to the Fathers Sauchez and Saurez of the profession. The time has gone by for discussing seriously whether or no angels have corporeal parts sufficient to give them a comfortable sitting on the point of a needle; or what amount of evil may be performed or dirt swallowed when the *intention* is a good one. Men now-a-days—and we trust our profession is no exception to the rule—require something clear and definite in the matter of morals. Once the door is opened, with however good an intention, to infringement of duty, it soon gets wide open. *Principiis obsta!*

We, therefore, assert that there is no good to come out of this semi-admission of homœopaths, under any certain limited restrictions whatever, into consultation. We defy any one to shew the case in which it is required for the cause of humanity. Imaginary cases of necessity may be easily suggested by an interested mind; and we may be very sure that, if once this lax discipline become an admitted rule of action, these cases—cases of humanity—will be as plenty as blackberries.

They, however, who go for the exceptional view, however good their intentions may be, quite forget to explain away the indirect mischief which they effect by the proceeding—the promotion and spread of homœopathy, encourage by their limited or silent patronage of it. And on this point, they are bound to give full and satisfactory explanations. The encouragement of homœopathy is effected in two ways; both by the semi-official, demi-ignoring of, as well as by boldly shaking hands with, the quackery. In the first place, a surgeon or a physician, especially when high in practice, by meeting the homœopath, encourages him to continue in his false position, and encourages others, who have an inclination to taste the benefits of this species of quackery, to enter its ranks. Thus tacitly patronised, the homœopath argues, and reasonably enough: "What matters it to us that the profession taboos men in our line of business, so long as the great Dr. A., or renowned Mr. B., shake us by the hand? We can very well afford to bear the general indignation of the profession so long as we have, *sub rosâ*, those great-minded men to sustain and harbour us in private."

Hence, then, the practice of homœoquackery is no longer felt by its professors to be a degradation; and that curb of restraint, the respect for professional opinion, which has doubtless kept many a man from taking it up, in the way so many do, merely as a good speculation, and as a short cut to lucrative practice, is removed away.

The other mode in which the quackery is thereby promoted is this: the patient and his friends—lovers of homœopathy — when they find medical man and quack running in the same groove, naturally come to the conclusion that homœopathy is, after all, no quackery, but merely a method of doing medicine different from the old style; that medical men don't object to other people practising it; and, indeed, that they consider, inasmuch as they permit its use, it may be just as usefully adopted, in certain cases, as the old style of thing. How, on earth, are the unknowing public to think otherwise, when they see these great doctors—illustrations of medical science—smirking and foregathering with the homœopath in consultation.

The *Medical Times and Gazette* has done well to recall to the memory of the British Medical Association that it has a duty which it might well perform in this matter; and we sincerely trust that, at its next meeting, it will not fail to state in explicit term its opinion on this point of medical morals, and take action thereon. We are well satisfied that it is a question which is much more likely to meet with a proper settlement at the hands of our brethren in the provinces than in Babylon. Those who live in large cities know well enough that, whatever they may be as centres of medical science, they are not remarkable as hotbeds for fostering the growth of medical virtues.

THE WEEK.

The *Daily News* very properly asks of red-tapeism an explanation on the following subject: "How it is that the good service pensions held out to the most meritorious medical officers in the sixteenth clause of the Naval Medical Warrant have as yet in no case been awarded, while the medical officers of the army have justly been long in the enjoyment of those honourable recognitions of merit and service?"

The members of the British Medical Association will have much pleasure in reading the following lines, which appeared in a recent number of the *Worcester Chronicle.* They shew the high estimation in which our President of Council is held in his native county; and they also afford an illustration of the value which the public can rightly set on professional services.

"It would look ungrateful to allow the retirement of Sir Charles Hastings from his post as Physician to the Infirmary, after a service of fifty years save one, to pass without a few words of complimentary notice. Sir Charles was elected House-Surgeon in 1812, and six years later (at the same time as the late lamented Dr. Malden) he was appointed one of the Physicians to the Institution. The amount of service he has rendered, during this lengthened term, to the interests of the charity and of suffering humanity, it is hardly possible to overrate. His large fund of medical knowledge, his eminent professional skill, his wide experience, fine faculties, and very valuable time, were unselfishly and strenuously devoted to the furtherance of the benevolent purposes of the Institution. It is too common to undervalue the services thus gratuitously rendered by the medical profession. They do not involve bodily labour, and are to the superficial observer easy to discharge. After a little consideration, a prescription is written, which seems simple enough. But what ought to be taken into account is the expensive medical education, the long and laborious study, the painful but necessary experience, the amount of thought and reflection and reading and observation required to constitute a skilled and competent medical practitioner. It is easy, no doubt, to jot down a prescription; to direct, in ordinary cases, the right mode of treating disease with a view to its cure may require small consideration, but the qualifications which beget this readiness and aptitude are dearly bought. They are only acquired with an infinity of pains and patience, great cost, and severe mental strain. Astronomers inform us before-hand of the occurrence and elements of eclipses, of the periods of rotation of distant bodies, and the recurrence of comets. The facts and conclusions are all that come before the public; the profound thought, the prodigious mass of calculation necessary to evolve these facts and conclusions, are not patent. So it is with the medical man: the labour and attention, the protracted study, the precious time which have been spent in his education and in acquiring the knowledge he practises with such little apparent effort, not being on the surface, do not strike the ordinary observer. The results alone, not the materials of the process, are for the most part impressed upon his senses.

"To no one does the maxim, time is money, apply more completely than to the medical man. To the medical man who, like Sir Charles Hastings, has for a long series of years had a very extensive practice, time is most essentially money, and the devotion of a considerable share of that valuable commodity, time, to the purposes of public charity, ought in consequence to be the more thought of, and draw after it the greater obligation. Time and skill are to the physician what capital and stock-in-trade are to the man of business; and the physician, who gives his time and skill, makes as solid and substantial a gift as though he bestowed gold or goods, and even one more valuable. It is clearly money's worth he dispenses; but it may be—in some cases it is—that for no amount of money could corresponding skill be purchased. Regarded in this light, the gratuitous services which the medical profession are prompt to render to suffering neediness, are entitled to the warm acknowledgment and gratitude of the public. If their charity does not take the form in which benevolence is most commonly exhibited—that of a pecuniary donative—it is more sterling and effective, and really confers a greater amount of relief. If some philanthropist, anxious for the good of his species, were to present £3,000, £2,000, or even £1,000, to the Infirmary, he would be greatly exalted, and the organs of public opinion would be loud in praise of his munificence. It would be putting, we conceive, a wholly inadequate value on Sir Charles Hasting's services to assess them at £100 a year. But even measuring them by that paltry standard, his fifty years tenure at the Infirmary would represent a donation of £5,000, a title of the strongest kind to public recognition. Besides his claims as a public benefactor, Sir Charles has deserved well and greatly at the hands of his brethren. During a long life he has assiduously laboured to advance medical knowledge, to purify the profession of pretenders and exalt its status, to reform the laws affecting it, and generally to raise its character and extend its wholesome influence."

We learn that a movement is on foot in Worcester for presenting a testimonial to Sir Charles Hastings on his retirement from the Infirmary.

On the 4th inst., the Metropolitan Counties Branch of the Association met, and, by unanimous vote, decided to recommend to the annual meeting, for election as President of the Association during the year 1862, Dr. Burrows. As the name of Dr. Conolly has been mentioned in connection with this selection by the metropolitan members, we feel bound, in justice to Dr. Conolly, to state that he withdrew his name, although he had been requested to come forward by the Branch Council. Dr. Conolly, on this occasion, as he has already done on so many others when the interests of the Association have been concerned, put all personal considerations and wishes aside. He thought it would be well that, in so stirring a region as London, the Association should be presided over by one who could bring more youth and energy to meet the occasion. An universal feeling of respect and sympathy was expressed by the meeting of the Branch for Dr. Conolly, in thus sacrificing his personal feelings for what he deemed to be, under all the circumstances of the case, the best interests of the Association.

We have this week to announce the resignations of their appointment of surgeons to St. George's Hospital, by Mr. Cæsar Hawkins and Mr. Cutler. Mr. Cæsar Hawkins has long stood before the profession and the public as one of the leading metropolitan surgeons of the day. He was elected to the office of surgeon to the hospital in 1829, and has, therefore, held that appointment for thirty-two years. He now retires, no doubt feeling that his large private practice and other duties are sufficient calls upon his powers. Mr. Cutler's name is familiar to a large London circle. He was elected assistant-surgeon in 1834, and surgeon in 1843, on the death of the late Mr. Walker. Mr. Cutler had formerly been an assistant-surgeon in the Life

Guards. Though not able to take an active part in the medical school, in consequence of his state of health, he was always most attentive to his duties, and most kind and considerate to all under his care. He retires with the kindest feelings towards him of those with whom he has so long been associated. The retirement of the two senior surgeons from one hospital on the same day, when both are still in the enjoyment of perfect health, and of physical strength equal to the performance of all the ordinary calls of practice, is an event quite in accordance with the present sentiments of the profession and the public. We have already referred to what may be now considered sane views on the tenure of office by medical men in hospitals, when lately detailing the resolutions which have been come to on this subject by St. Mary's Hospital; and we then ventured to prophesy that the rules adopted by St. Mary's Hospital will gradually meet with acquiescence in all the public medical institutions of the country. Mr. Prescott Hewett and Mr. George Pollock will, of course, succeed to the two vacancies thus created in the offices of surgeons to St. George's Hospital. Two assistant-surgeons will then have to be elected in their places.

The profession can recollect that, some few years ago, the Horse Guards and Admiralty were "sick" for want of a proper supply of medical men for the army and navy; and, like sick people, they became penitent in their weakness—finding that it was necessary for them to become just, in order to obtain what they required. They therefore passed a series of warrants, whereby the status of the medical army and naval department was put upon an equitable and honourable footing; and consequently have ever since found their wants in this wise well provided for. Now, however, having fully recovered from their sickly condition, like that iniquitous shaveling who, when he found himself strong on his legs again, forgot his penitential promises of future good ways, these strongholds of red-tapeism are rapidly returning into their evil courses. They no doubt think that, because they are at this moment well supplied—or over-supplied, as they make it out—with medical men, they can again begin to play off their old tricks of oppression upon this part of the services. They forget that, but for the concessions which they made to the medical services in the warrants of 1858 and 1859, the medical service would have soon ceased to be a service at all—at least, in the sense of being an efficient department. Well, now comes forth another warrant, in this year of grace 1861, amending, to the prejudice of the medical man, the warrants above referred to; and, as we venture to think, thereby breaking word with those gentlemen, who entered the army on the faith of the conditions of the warrant of 1858 being fully maintained, and shaking the confidence of those medical students who are at present aspiring to the honour of entering the medical services of the army and navy. We suspect, and we hope, that the results of this kind of breaking of pledges will be to arrest that flow of high medical talent which has during the last two years steadily set in to the belligerent services. It is certain that it will act banefully, by exciting uncertainty and discontent in the minds of the medical officers *in esse*. The warrant of 1861 degrades the surgeon, reducing him from the position to which he had been raised. The excuse for the thing is this—that it must be done, because, "under the warrant of 1858, the surgeon of a regiment or of a ship might, under certain circumstances, possess higher relative rank than his own commanding officer—a state of things which is incompatible with the preservation of discipline and subordination in the military services." It has been clearly shown, in answer to this position, that the objection is merely a pretence—is, in fact, frivolous, and, practically speaking, unworthy of consideration. "By the Queen's Regulations," we are told, "and by the terms of the warrants in question, the relations between medical officers and executive officers of any rank (junior or senior) are so explicit and clear that they cannot be questioned." Besides, what "medical officer," it is asked, "in his senses would dream of assuming military command in either service over his executive brother, of whatever standing?" "And if it be said that these safeguards against the arrogation of undue authority, in virtue of their relative rank, have on some occasions been broken through by medical officers, and that the alteration in their position was consequently rendered imperative,—we reply, that such cases would have been more properly dealt with by courts-martial than by the sweeping and harsh measure of degrading every member of a class. Decimation has ever been considered an irrational proceeding, even when resorted to in a military exigency; but to visit the offences of the few upon the heads of the many is altogether repugnant to the principles of legal and moral right."

At the annual meeting of the Royal Humane Society, the Chairman presented the gold medal of the society to Dr. Christian, who, he said, for a long period, had given his services gratuitously to them. In consideration of the many lives he had saved, the committee had decided on presenting him with the gold medal of the society. The honorary silver medal of the society was also presented to Dr. Mackintosh, of the 10th Brigade Royal Artillery, and others, "for having saved the lives of fellow-creatures with great gallantry, and under circumstances of great personal danger."

The *Dublin Medical Press* copies the following from a daily paper. The editor, naturally enough, groans over the ignorance which such things in print indicate on the part of those who can, at all events, read and write.

> "A fatal case of hydrophobia is reported from the neighbourhood of Newport, county Tipperary, the victim being a fine young woman, the daughter of a farmer of that locality. It appears that, while engaged in some out-door employment, a neighbour's dog attacked and bit her in the hand, and she soon evinced symptoms of the consequence. Hydrophobia, in its most fearful aspect, set in, and she became so hopelessly mad that *it was found necessary to terminate her sufferings by smothering her between two beds.* The dog was subsequently shot."
>
> "Sir,—May I ask through the columns of your paper, whether the report which has been so widely circulated during the past few days in our city be true—viz., 'that several men in Portobello and Island-bridge Barracks have taken the glanders from their horses, in consequence of which those in authority there have caused some of the men *to be subject to immediate death by smothering*'. If this be true, I ask, can such conduct be warranted? Your obedient servant, "R. B. B."

The following is the opinion held by a French tribunal of the responsibility attaching to a medical man in the performance of his duty:—

> "It is generally admitted in jurisprudence that the medical man chosen by the family cannot incur responsibility, in consequence of the result of the treatment, or of operations performed by him, after a conscientious investigation of the case, although his diagnosis may be erroneous. Responsibility can attach to him, not through any medical error which he may have committed, but only as a consequence of gross ignorance or negligence (*faute lourde ou ignorance crasse*)."

Is the ordinary obstetric forceps applicable, in regard to the shape and length of the blades, to all cases liable to present themselves in practice? Such was the question raised by Dr. Graily Hewitt, at the meeting of the Obstetrical Society, on Wednesday evening last. The author of the paper contended that, in cases of excessive elongation of the fœtal head such as are sometimes met with, especially in primiparæ, the ordinary form of forceps used in this country is inapplicable, the curve and length of the blades not being adapted to the altered curve and length of the side of the head; and a case was mentioned in which from this cause actual difficulty was experienced in applying the ordinary forceps. It does not appear that as yet any modification of the forceps has been generally admitted or insisted on in obstetric practice than that which has reference to the *position* of the head in the parturient canal, changes in the *shape* of the head not being provided for. The object of the author of the paper was to insist on the necessity for the recognition of this latter principle—a most important one, as it appears to us to be; and in cases of excessive elongation of the head, such as that described, to recommend the employment of a modified form of instrument. A fuller account of the subject we shall present to our readers next week.

In the Academy of Medicine, M. Piorry has again sung the praises of the pleximeter and pleximetry, taking occasion of a modification introduced into the instrument by Dr. Cros.—M. Gosselin presented a *solid* report on a paper relating to external urethrotomy in cases of obliteration of the urethra, or of stricture through which a bougie cannot be passed.—M. Joseph Chaley, who died on the 15th of April last, was the constructor of the famous Bridge of Fribourg. He was once a Doctor of Medicine, and practised his profession at Lyons, where he founded the first orthopædic establishment.—The *post mortem* examination of Count Teleki showed, in addition to the wound of the heart caused by the pistol-shot, a considerable amount of chronic disease. The whole of the dura mater was firmly adherent to the skull, which was of double the ordinary thickness; the Pacchionian corpuscles were very numerous; the pia mater whitish and semi-opaque; the substance of the brain was softish, and presented numerous vascular points when cut across. Three drachms of serum were found in the lateral ventricles; numerous earthy granules existed in the perinæal gland; the cerebellum and pons Varolii were very vascular. The aorta at its origin was dilated, its inner surface roughened. Both lungs were completely adherent. The liver also was at many points adherent, and its substance presented a nutmeg-aspect. The pylorus was very contracted.—M. Becquerel, who for a long time past has been prevented attending the meetings of the Academy by reason of a severe accident, read an important note on a favourite study of his, viz., the Temperature of the Air in the Neighbourhood of Trees.—Creasote is reported in the French Academy to be a good preserver of anatomical specimens.—M. Goldsmith states that, on the 5th of May, he discovered a new planet of the eleventh magnitude; this is the fourteenth planet discovered by this industrious observer.—M. Colin of Alfort has studied the mode of sensibility in the filaments of the ganglions of the great sympathetic, in the sheep, the goat, and the horse; and finds that his results coincide with those of M. Flourens, obtained in experiments on smaller animals.

Royal Medical Benevolent College. An election of six pupils to the schools connected with this College took place last week at the Freemasons' Tavern, Great Queen Street. Lord Chelmsford, President of the College, was in attendance. The preliminary business having been gone through, the ballot commenced at 12 o'clock, and closed at 3, when the following boys were announced as the successful candidates:—Joseph D. Nelson, 6,500 votes; James Parker, 6,170; Samuel Arthur Taylor, 5,946; Walter Little, 5,658; William H. Gall, 5,285; and John Pritchard, 5,035.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
North Wales. [Annual.]	Wynnstay Arms Hotel, Wrexham.	Tuesday, June 18th, 11.30 A.M.
South Midland. [Annual.]	General Infirmary, Northampton.	Thursday, June 27th, 12.30 P.M.
East Anglian. [Annual.]	Norfolk and Norwich Hospital.	Friday, June 28th, 2 P.M.
Metropol. Counties. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 2nd, 3 P.M.

NOMINATION OF PRESIDENT-ELECT FOR 1862.

A Special General Meeting of the members of the Metropolitan Counties Branch and of other members of the Association residing in the metropolitan district, was held at 37, Soho Square, on Tuesday, June 4th, at 4 P.M. The chair was taken by John Birkett, Esq., President of the Branch; and there were present forty-one members.

A letter to the Council of the Association, cordially inviting the Association to meet in London in 1862, was read; and, having been adopted by the meeting on the motion of Mr. Propert and Mr. Roots, was signed by the President.

Dr. Tuke proposed, Mr. Bottomley seconded, and it was resolved—

"That a circular be sent to the members of the Association in the metropolitan district, requesting them to add their names to the formal invitation to the General Council for the members of the British Medical Association to meet in London in 1862."

Dr. Richardson proposed, Dr. Lankester seconded, and it was unanimously resolved—

"That George Burrows, M.D., F.R.S., Physician to St. Bartholomew's Hospital, be recommended as the President-elect of the British Medical Association for the year 1862."

Dr. Graily Hewitt moved, Dr. Sibson seconded, and it was resolved—

"That the Council of the Metropolitan Counties Branch be requested to constitute themselves into a Committee for the purpose of arranging a programme of the proceedings of the meeting in 1862, and that the Council be empowered to invite the cooperation of other members of the Association in carrying out this object, under the sanction of the General Council."

After a vote of thanks to the Chairman, the meeting adjourned.

Relics of Mexican Barbarity. Several skeletons of human beings who were buried alive between walls, in the convent of St. Domingo, in the city of Mexico, have been recently discovered. They are fettered hand and foot, and bear evidence of writhing with agony when they drew their last breath. (*Med. and Surg. Rep.*)

Reports of Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, May 28th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

A letter was read from Sir Benjamin Brodie relative to the paper "On Asphyxia and the Use of the Hot Bath," by A. T. H. Waters, M.R.C.P., read at the last meeting of the Society. The letter referred to the question of the period of the continuance of the heart's action in cases of asphyxia. Sir B. Brodie had never, in his experiments on the subject, known the rhythmical contractions of the heart to continue for more than four minutes and a half after complete submersion; and believed that if they had once ceased in asphyxia they could not be restored. Cases of recovery after a longer submersion he attributed to the action of the heart having previously ceased in a state of syncope.

ON THE DISEASES OF THE KIDNEY ACCOMPANIED BY ALBUMINURIA.

BY W. H. DICKINSON, M.B. CANTAB.

This paper was intended as a sequel to one by the same author in the last volume of the *Transactions.* In that communication it was maintained, on anatomical grounds, that the disease which occasions the smooth mottled kidney is essentially different from that which gives a granular surface to the organ. The first is characterised by excess of cell-growth within the tubes, and is in fact chronic nephritis; whilst the other is the result of a degeneration commencing in the intertubular structure. The purpose of the present communication was to add the clinical details. These were obtained in part from an analysis of 369 well-marked fatal cases of renal disease, extracted from the records of St. George's Hospital during a period of ten years, and some of the results were given in a table. Other particulars were obtained from a more minute examination of cases under the author's notice during life, taking care to use only those in whom the state of the kidney had been attested by *post mortem* examination.

Both forms of disease are more frequent in the male than in the female sex: the smooth mottled kidney nearly in the rate of three to one; the granular nearly in that of two to one.

The tubular disease (chronic nephritis) is peculiar to the earlier periods of life, attaining its greatest frequency between the ages of twenty and thirty. Granular degeneration is never seen except in adults, and is most common after the age of forty. These peculiarities are of the highest importance in the history of the complaints, and probably account for some of their minor differences. A further argument for the independence of the two conditions is to be deduced from the fact, that persons with predispositions to gout and to the formation of tubercle are especially liable to granular degeneration.

The clinical history of chronic nephritis, or the tubular disease, was then briefly treated. This complaint owes its origin to various causes of renal hyperæmia, exposure of the surface of the body to cold, the elimination of the poisons of scarlatina and other exanthemata, the irritation of turpentine or cantharides given medicinally, the vicarious secretion of bile, or the congestion of successive pregnancies. The usual duration of the disorder appears to be within six months; twenty-six out of thirty-four fatal cases, under the author's own observation, terminated within this period, while only two survived the year.

Dropsy is the most invariable symptom of the disease, next to albuminuria. It invades the cellular tissue, the pleura, the peritoneum, and the pericardium, with a frequency corresponding to the order in which they are mentioned.

The frequent occurrence of inflammation of the serous membranes and of the lungs in this complaint is contrasted with the great liability to bronchitis, which accompanies granular degeneration.

Diarrhœa, especially in the later stages, and pain in the loins, are greatly more frequent, while nocturnal micturition is less so, than with the more chronic form of disease.

Coma often occurs as the sequel of epileptic attacks, particularly in persons who have been reduced by vomiting or diarrhœa.

The urine is scanty, except during the later stages, or while a temporary attack is passing away. It is usually acid, and often deposits uric acid and urate of soda. It is discoloured with blood in a large proportion of cases, especially at the outset, and yields a bulky precipitate of albumen, independently of any such admixture. The specific gravity ranges from 1010 to 1030, but on the whole does not depart much from the limits of health. The microscopic characters of the sediment were considered somewhat in detail. Renal epithelium is deposited in a natural state, or containing oil-globules, or converted into pus-cells. The fibrinous cylinders are to be regarded as *casts* only of the straight tubes. Though some of their materials are derived from other portions of the gland, the fibrine which gives them consistency is here supplied. They are of four varieties: transparent, uniform, glassy cylinders: similar cylinders embedding entire epithelial cells; casts of granular appearance, containing epithelium in state of disintegration; and, lastly, such as contain blood-corpuscles. All these forms are incidental to the disease, the casts embedding entire epithelial cells being the most characteristic.

Granular degeneration of the kidney now became the subject of a short sketch. This is the result of gradual changes originating in the intertubular tissues of the organ, and depending on some constitutional vice which gains ascendancy with advancing years. Large portions of the secreting tubes are actually destroyed by the process, and the blood-vessels of the gland are rendered impervious. The gradual change which the patient undergoes from health to infirmity corresponds with the slowly increasing incapacity of the gland. This disorder can scarcely ever be attributed to any external cause, contrasting, in this respect, with what is observed in the other form of disease. The patient, perhaps, has for months a little fulness of the ankles at night, to which he does not pay much attention. The features become sharp, and the complexion sallow; and it is found, on inquiry, that for long previously the urine has been copious, and passed with frequency, especially at night. The indefinite nature of its accession renders it impossible to fix accurately the duration of the disease. In twenty-one cases, where the advent of the first symptom was made a matter of particular inquiry, this was found to have appeared at periods varying from four weeks to ten years before the death of the patient.

Dropsical effusion is rather incidental to the disease than characteristic of it. In many cases it is altogether absent; in others, only slight in extent. It only comes on in the later periods of the disease, when the urine is no longer profuse. The bloated aspect and ivory pallor peculiar to chronic nephritis are often contrasted, when the kidneys are granular, with a withered aspect, sharpened features, and a muddy skin.

Peritonitis, pleurisy, and pneumonia, are comparatively rare, while the frequency of bronchitis is greater than with the other variety of disease. Increased frequency of micturition is usually met with, and often gives the first indication of organic change; while diarrhœa and pain in the loins are infrequent.

An inquiry into the association of granular degeneration of the kidney with valvular disease of the heart led to the conclusion, that this is more frequent than can be attributed to accidental coincidence, and that the renal disturbance is usually the primary affection.

Evidence was brought to show that extravasation of blood within the cranium is peculiarly apt to take place in connexion with granular degeneration of the kidney; in fact, that the latter disorder is present in nearly one-half of the cases of apoplexy subjected to examination in St. George's Hospital. The mode of connexion between the two diseases was discussed.

Other "head-symptoms" are apt to occur in this disease: either epileptic convulsions, as in chronic nephritis, or, what is in some measure characteristic, patients often pass gradually into a comatose state without any such warning, the change being preceded by dimness of sight, giddiness, peculiarity of manner, or delirium.

The urine is increased in quantity, except in the later periods, exactly the opposite of what takes place with the more acute disorder. It is usually paler than natural, and is comparatively seldom discoloured with blood. The albumen is often in minute quantity, and the specific gravity low, varying from 1008 to 1020. The casts are various in character, but those most often present are of coarse granular texture, and may be regarded as very characteristic of the disease.

JUNIOR MEDICAL SOCIETY OF LONDON.

Thursday, May 30, 1861.

Alexander Squire, Esq., President.

The Society met at Charing Cross Hospital.

EXCISION OF THE KNEE-JOINT.

BY EDGAR A. BROWNE, ESQ.

After passing rapidly in review the history of the operation from the time of Hippocrates to the present day, the author proceeded to discuss the merits of excision. He pointed out that excision was not, as many supposed, a cure for knee-joint disease; but, under certain circumstances, an admissible substitute for amputation. In any fashionable operation, little reliance could be placed on statistics, as it was to be feared that many surgeons had taken out knee-joints where they should have removed limbs. However, it might be stated that at one hospital (Guy's) they had reduced the death-rate for amputations to 14·5 per cent.; but that at another (Jersey) the mortality for excision in similar cases was no higher than 7·5 per cent. The statistics for all the recorded cases of excision were, 21·54 deaths, 11·05 subsequent amputations (of which 9·5 die), and 67·4 recoveries. A high rate of success could only be obtained by due and proper selection; and it was necessary that the patients' general health should be as good as possible. A successful case of Mr. Hancock's, in which deep abscess extended half way up the thigh and as far down the leg, was related, to shew how largely the soft parts might be diseased without militating against the operation. Mr. Barwell's rules for the state of the joints were cited. The operation was admissible only when the disease was within certain limits; and, in young subjects, these limits were within the boundary line of the epiphyses, removal of which was tantamount to stopping the growth of the limb. Further evidence was wanted to shew how far articular fractures were to be treated by excision. The paper was illustrated by cases and by pathological specimens.

Mr. Yeo (King's College) related the particulars of four successful cases of the operation at that hospital.—Mr. King (London) mentioned two cases; one for disease, and one for gunshot wound, both unsuccessful.—Mr. Galton (Guy's) related a case in which the cartilage had been exposed, and was seen ulcerated; cured by rest.—Mr. Miller (University College) related two successful cases, in which complete use of the limb was restored.—Mr. Short (Charing Cross) related a successful case he had met with in the country.—Mr. Morton (King's College) mentioned a very bad case of diseased knee cured by excision.—The discussion was also shared in by Messrs. Rouse (St. George's); Leachman (University College); Meggy (Guy's); Travers (Charing Cross); and Venning (St. George's).

There were various pathological specimens under the microscope.

The President showed a specimen (for which he was indebted to Dr. Jenner) of complete collapse of both lungs, occurring in a highly rickety child. The child, who had a slight cough, had been crying a good deal during the day, and was found dead in bed the following morning. On *post mortem* examination, complete collapse of both lungs was found.

Medical News.

Royal College of Surgeons of England. The following gentlemen passed their primary examinations in Anatomy and Physiology, at a meeting of the Court of Examiners, on May 28th and 29th, and when eligible will be admitted to the pass examination:—

Guy's Hospital.

Bennett, Sidney
Couch, John Quiller
Eddowes, Arthur Benjamin
Fawcus, Henry Robert
Owen, Francis Meredith
Prater, Charles Augustus
Row, William
Sargent, George P.
Smith, John

Edinburgh School of Medicine.

Davidson, Andrew
Fernandes, Albert L.
Henry, John McWilliams
Reid, James G.
Smart, Andrew
White, John G.

Leeds School of Medicine.

Fryer, John
Heaps, John
Roberts, James Dixon
Ward, Henry Augustus

King's College.

Deville, Titus
Pearson, Thomas Robert
Streglitz, Lewis F. von

Glasgow School of Medicine.

Autey, William
Jaap, John
Williams, William Morgan

Dublin School of Medicine.

Bothwell, George G.
King, Daniel Joseph
Spencer, John A.

St. George's Hospital.

Knapp, Henry Leigh
Norton, William Augustus
Williams, John

St. Mary's Hospital.

Attwood, James L. L.
Deans, John

Manchester School of Medicine.

Booth, Frederick Wm.
Pettinger, William M.

Birmingham School of Medicine.

Edwards, John
Thompson, Thomas

University College.

Gilson, Francis G. S.
Murlin, John

Westminster Hospital.

Cronin, Eugene Francis

Charing Cross Hospital.

Hunt, Walter

Bristol School of Medicine.

Davey, James Samuel E.

St. Bartholomew's Hospital.

Fletcher, Henry S.

Cork School of Medicine.

Forrest, John P.

Hull School of Medicine.

Fergusson, Daniel W.

The following gentlemen were admitted Members of the College on June 3rd:—

Allingham, James Henry, Finsbury Square
Atkinson, Samuel Smart, Newcastle
Beckett, George Macartney, Calcutta
Bogg, Thomas Wemys, Louth, Lincolnshire
Brett, William, jun., North Audley Street, Grosvenor Square
Croskery, Robert, Belfast
Deville, Titus, Paris
Foster, Thomas, Blaydon, near Newcastle-on-Tyne
Garner, Robert Cotterill, Stoke, Staffordshire
Hirst, Samuel Charlesworth, Wakefield
Hollinworth, John, Hyde, Manchester,
Jones, William, Whitehaven
Kempe, Charles Patrick, Crugsillack Veryan, Cornwall
Leaf, Walter, Leaf Square, Manchester
Lewis, Frederick, Paddington Street
Marsh, Frederick Haward, Brome, Suffolk
Phillips, James Mathias, Hendre, St. Dogmells, near Cardigan
Ricketts, Frederick William, Liverpool
Robson, Matthew James, North Shields
Shapland, John Dee, North Molton, Devon
Spalding, William, Maryland, United States
Webb, John Wesley, Abersychan, Monmouthshire

The following gentlemen were admitted on June 4th:—

Arthur, James, Guernsey
Bond, Charles Radcliffe, Dalston
Copland, Frank, Chelmsford
Croker, John Rees, Islington
Galbraith, Charles John, Melbourne, Australia
Harland, Henry, Fletching, Sussex
Hunt, Albert Dunning, Chagford, Devon
Husband, Edward, Normanby, Yorkshire
Jaap, John, Paisley
Jones, Richard Owen, Bala, Merionethshire
Jones, Thomas, Rhyl, Flintshire
Lintzgy, William Johnson von, Calcutta
Lumley, Bartholomew, Corbridge, Northumberland
Nash, William, Ilford, Essex
Rutter, Joseph, Wandsworth
Simmons, Robert Pollock, Olney, Bucks
Sutton, Charles Frederick, Cambridge Terrace, Regent's Park
Tyley, Richard Purnell, Wells, Somerset
Ward, Charles Parker, Gloucester
Wilcox, Richard Wilson, Torrington Square
Wine, Henry Charles, Bristol

At the last meeting of the Court of Examiners of the Royal College of Surgeons—

Fegan, Henry, of Greenwich Hospital (a member of the College)
Mullan, Andrew, of H.M.S. *Impregnable*, Plymouth (a member of the Edinburgh College of Surgeons), passed their examinations for Naval Surgeons; their diplomas bearing date respectively May 19th, 1856, and August 5th, 1857.

The following members of the Royal College of Surgeons of England, having undergone the necessary examinations, were admitted Fellows of the College at the last meeting of the Council.

Couper, John, Finsbury Circus; diploma of membership dated November 4, 1859
Drysdale, Charles Robert, Southampton Row; May 7, 1858
Gant, F. J., Grenville St., Brunswick Sq.; May 18, 1849
Hickman, William, Alfred Street, Bedford Square; June 25, 1858
Jones, Philip Sydney, Sydney, New South Wales; Oct. 29, 1858
Michael, David, United Hospital, Bath; April 6, 1857
Nayler, George, The Barracks, Warley, Essex; June 4, 1852
Wildbore, Daniel Henry George, Charlotte Street, Fitzroy Sq.; July 31, 1848

Apothecaries' Hall. On May 30th, the following licentiates were admitted:—

Beck, W. R., Keighley
Crawford, C. H., King's Own Staffordshire Light Infantry
Garner, R. C., Stoke-upon-Trent
Humphreys, M. H., Cheltenham
Hunstone, G., Broughton, Manchester
Lanchester, H. T., Norwich
Pocklington, E., Walesby
Rew, James, Exeter
Waller, C. B., Finsbury Square
Williams, S. W. D., Gloucester

APPOINTMENTS.

Jackson, J. Hughlings, M.D., appointed Physician to the Islington Dispensary, in the room of Dr. Webb, resigned.

Royal Army. The following appointments have been made:—

Curran, Staff-Assistant-Surgeon W., to be Assistant-Surgeon 88th Foot, *vice* Knipe.
Hadley, Staff-Surgeon-Major H., M.D., retiring on half-pay, to have honorary rank of Deputy Inspector-General of Hospitals.
Hamilton, Staff-Assistant-Surgeon J. B., M.B., to be Assistant-Surgeon 3rd West India Regiment, *vice* Hamilton.
Lloyd, Staff-Surgeon S. McV., M.D., to be Surgeon 2nd Foot, *vice* Hendley.
O'Nial, Staff-Surgeon J., to be Surgeon 31st Foot, *vice* Smith.
Rennie, Staff-Surg. D. F., M.D., to be Surg. 31st Foot, *vice* Daniell.
Stafford, Staff-Assistant-Surgeon P. W., to be Assistant-Surgeon 56th Foot, *vice* Boyd.
Wales, Staff-Assistant-Surgeon J., to be Assistant-Surgeon 2nd West India Regiment, *vice* Harris.
White, Staff-Assistant-Surgeon T. H., M.D., to be Assistant-Surgeon 80th Foot, *vice* Gilchrist.

To be Staff-Surgeons.

Daniell, Surgeon W. F., M.D., 31st Foot, *vice* Hadley.
FitzGibbon, Surgeon R. E., 2nd West India Regiment, *vice* O'Nial.
Hendley, Surgeon J., 2nd Foot, *vice* Lloyd.
Smith, Surgeon A., M.D., 51st Foot, *vice* Rennie.

To be Staff-Assistant-Surgeons:—

Boyd, Assistant-Surgeon C. W., 56th Foot, *vice* Masterson.
Gilchrist, Assistant-Surg. R. M., M.D., 80th Foot, *vice* Stafford.
Knipe, Assistant-Surgeon J. C., 88th Foot, *vice* Semple.
Royle, Assistant-Surgeon A., 58th Foot, *vice* White.
Simon, Assistant-Surgeon G., M.D., 32nd Foot, *vice* Curran.

Royal Navy. The following appointments have been made:—

Anderson, William, Esq. (*a*), Assistant-Surgeon, to the Artillery Division of Marines.
Cunningham, Charles L., Esq., Acting Assistant-Surgeon, to the *Steady*.
Dunwoodie, John, Esq., Assistant-Surgeon, to the *Hibernia*, for Malta Hospital.
Harley, Francis B., Esq., Acting Assistant-Surgeon, to the *Victor Emanuel*.
Hudson, John, Esq., Assistant-Surgeon, to the *Southampton*, for Sheerness Yard.
Moore, Francis H, Esq., Assistant-Surgeon, to Haslar Hospital.
Mullan, Andrew, Esq., Assistant-Surgeon, to the *Impregnable*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Burns, W. M'Gregor, Esq., to be Assistant-Surgeon 2nd Company Ayrshire A.V.
Clarkson, W. N., Esq., to be Surgeon 2d North Riding A.V.
Harris, F. H., Esq., to be Honorary Surgeon 20th Suffolk R.V.
Hartley, J., Esq., to be Surgeon 1st Administrative Battalion East York R.V.
Holmes, F., Esq., to be Surg. 2d West Riding Engineer Volunteers.

DEATHS.

Blandford, Silas, Esq., Surgeon, at Wincanton, on June 2.
Kimbell. On May 29th, at Knowle, near Birmingham, Catherine, widow of the late John Kimbell, Esq., Surgeon.
Lloyd. On June 4, at 14, Bedford Row, aged 5, Jessie E., youngest daughter of E. A. Lloyd, Esq.
*Matthews, Samuel, Esq., at Manchester, lately.

The Irish Medical Association. The annual meeting of this Association was held in Dublin on Monday.

The Medical Council will meet on June 27th, at the Royal College of Physicians, London, for the despatch of business.

Society of Arts. The second *conversazione* of this society took place at the South Kensington Museum on Saturday evening, the 1st inst. The company was received by Sir Thomas Phillips, F.G.S.

Dr. Livingstone. Satisfactory letters have been addressed by Dr. Livingstone to the Astronomer Royal at the Cape. The Doctor on the 1st of December met Bishop M'Kenzie at the mouth of the Zambesi.

Testimonial to Dr. Jacob. On Monday evening last, a dinner, at which between sixty and seventy gentlemen were present, was held in the Examination Hall of the Royal College of Surgeons of Ireland by the subscribers to the medal that had been struck in honour of Dr. Jacob. After the dinner, an address, and a copy of the medal, were presented to Dr. Jacob, who made an appropriate reply.

Royal Medical Benevolent Fund Society of Ireland. The annual meeting of this Society was held on Monday last, in the Library of the Royal College of Surgeons of Ireland. Since the last year, the title of "Royal" has been assumed by permission. The number of applications to the Society during the year had been seventy-eight, and the highest grant awarded amounted to £21.

Sanitary Condition of the Indian Army. A meeting of the Royal Commission on the Sanitary State of the Army in India was held at the War Office on Saturday last; the Right Hon. Lord Stanley, M.P., in the chair. The other commissioners present were Sir Proby Cautley, K.C.B.; Colonel Greathed, C.B.; Sir Ranald Martin, Physician to the Council of India; Dr. Gibson, C.B., Director-General, Army Medical Department; Dr. Sutherland; and Dr. Farr.

The Blind in Ireland. The report of the Molyneux Asylum for Blind Women at Dublin has just been issued. There are four thousand blind women in Ireland, and nearly as many of the other sex. Mr. Wilde states that there is a greater proportion of blind in Ireland than in any other country of Europe, except Norway. It appears from the Poor-law inquiry now in progress, that there are one thousand seven hundred blind paupers in the Irish workhouses.

Royal Humane Society's Operations. The report read at the annual meeting of this society stated that, during the past year, 156 cases, attended with risk to the lives of 187 persons, had been treated by the society; and of the persons immersed, 172 were recovered. 68,792 persons bathed in the Serpentine in the course of the past twelve months; and out of twenty-seven casualties, two were fatal. A variety of details of an interesting character were given in the report, which also stated that, since the establishment of the society, the number of lives saved and restored in this country was 30,000. During the late frost, the number of skaters and sliders in the parks and Kensington Gardens was estimated at 563,570, of whom 146 were rescued from a watery grave by the appliances of the society.

Salary of the London Medical Officer of Health. At the last meeting of the City Commission of Sewers, it was proposed to increase the salary of the medical officer of health from £400 to £600. Dr. Abraham called to mind how immensely the Commission had gained in public estimation by the efficient manner in which its medical functions had been performed, especially by Dr. Letheby during the last six years. He questioned whether they could have found in the whole metropolis a man who would have served them more ably, faithfully, and assiduously. They were well satisfied with Mr. Simon, but they had much greater cause to be satisfied with Dr. Letheby. He had not only shown himself equal to every duty required of him, but had discharged all his functions himself. After some further discussion, the motion was carried, with a qualification to the effect that that sum was to cover the duties which Dr. Letheby might have to discharge for the Commission as public analyst, under the Act for preventing the adulteration of food and drinks.

Death by Swallowing Artificial Teeth. On Thursday, May 9th, Peter Brennan, residing in Albany, while skylarking with a friend, received a sudden blow which caused him to faint. On recovering, he discovered that he had swallowed his false teeth. There were four teeth, three at one end and one at the other end; the plate having, of course, hooks, whereby to fasten to the adjacent natural teeth. The entire length of the plate was fully two inches. He applied to physicians for relief; but no relief could be given him, and he returned home. His respiration meantime had been uninterrupted; but his stomach had become so irritated as to make it impossible to introduce anything, even the softest sponge, into it, every touch producing violent and bloody vomiting. The next morning it was found that emphysema of the head and neck had supervened. The unfortunate man was then suffering from imperfect respiration, and was unable to take anything but fluids. Brennan lingered on in this terrible condition, unable to eat, and respiration growing more and more impeded, until, after living thus six days, he died on Monday afternoon, as well of starvation as of suffocation, at 5 o'clock. A *post mortem* examination was held; and the plate was found in the œsophagus, immediately below and level with the top of the breast-bone, lying transversely across, and its broken and sharp hook-points having cut, on the right side, a gash an inch and a half long, and pierced the upper lobe of the right lung, producing an intense inflammation of the parts, and allowing what food he had taken to pass into the pleural cavity. On the left side, the œsophagus was perforated, and the plate firmly imbedded into the substance of the throat. Extensive ulceration of the lungs and neighbouring parts had supervened. (*American Paper.*)

Acclimatisation of Animals. The first annual report of the Acclimatisation Society states that the efforts to acclimatise in Australia have been crowned with success. Animals have been imported into that country in sufficient quantity to establish their race permanently, unless there should prove to be some insuperable difficulty in the way of such establishment—including the sheep, alpaca, Angola goat, camel, red deer, fallow deer, spotted axis, pea fowl, common pheasant, partridge, swan, carp, goldfish, thrush, blackbird, starling, linnet, goldfinch, Java sparrow, squirrel, and glow-worm. In a few years many of these animals and birds will become of great importance to Australia; the alpaca alone has already opened up a new field of industry, which in a few years will most materially increase the actual wealth of the country.—*Australian Gazette.*

Relative Rank of Medical Officers in the Navy and Army. Her Majesty has been graciously pleased to direct, by her Order in Council dated April 16th, 1861, that the relative rank of officers of the navy and army shall, in future, be as follows:—Inspector-General of Hospitals and Fleets, after three years service on full pay as such, to rank with Major-General, according to the date of the completion of the said three years service. Inspector-General of Hospitals and Fleets, under three years service on full pay as such, to rank with Brigadier-General, according to the date of commission. Deputy Inspector-General of Hospitals and Fleets, after five years service on full pay as such, to rank with Colonel, according to the date of the completion of the said five years service. Deputy Inspector-General of Hospitals and Fleets, under five years service on full pay as such, to rank with Lieutenant-Colonel, according to date of commission. Staff-Surgeon to rank with Lieutenant-Colonel, but junior of that rank. Surgeons to rank with Major, according to date of commission. Surgeons, promoted on and after the 28th March, 1861, to rank with Major, but junior of that rank. Assistant-surgeon, after six years service on full pay as such, to rank with Captain, according to the date of the completion of the said six years service. Assistant-Surgeon, under six years service on full pay as such, to rank with Lieutenant, according to date of commission.

Brompton Hospital for Consumption. The twentieth annual general meeting of the subscribers to this institution was held on Thursday week, in the board-room of the hospital. The Rev. Sir Henry Foulis, Bart., took the chair. The report stated that the number of in-patients admitted during the year had been 895, and that 180 had been in the house on the 31st of December, 1859. Of the 1075 under treatment, 729 had been discharged greatly relieved, 158 had died, and 188 remained in the hospital. The applications for relief had been very numerous, and the full number of beds (200) had been during the year continuously occupied; and there had been 231 applicants at one time waiting for admission, showing a large increase on former years. The out-patients, who attended from all parts of London, Middlesex, Surrey, Bucks, Kent, Sussex, and other adjacent counties, had numbered during the past year 5070, as against 4647 and 3971 in the preceding two years. The cash account showed the following results:—Annual subscriptions, £4129 : 4; donations, £4220 : 3 : 6; incidental receipts, £90 : 16 : 8; interest on deposits, £110 : 0 : 1; dividends, £57 : 6 : 6; charity sermons, £468 : 12; legacies, £2224 : 3; rents of the hospital estates, etc., £405 : 18 : 4; and, after payment of all charges, a balance remains in hand of £711 : 19 : 6. The Rose Fund, established from funds raised for a memorial picture of Mr. Rose, and applied, at that gentleman's desire, for the formation of a fund to be applied with such contributions as might be obtained in providing relief for the patients by clothes or otherwise on leaving the hospital, exhibited subscriptions, £32 : 17 : 6; donations, £31 : 17 : 6; dividends, £25 : 8 : 2; other sources, £22 : 15; balance in hand, £39 : 12 : 1; with cash distributed to the objects of the fund, £102 : 15 : and stock, £889 : 4 : 3.

Ether *versus* Chloroform. The following is the chief portion of a reply addressed by Dr. Kidd to the Secretary of the Boston Committee on the above question.

"Sir,—With regard to the questions put to me by the Committee at Boston, as to deaths from ether, I think the impression in Europe is different from that in America, that no accidents have occurred from ether. I find thirty-six cases of death from administration of ether amongst my notes. . . . .

"It may be sufficient at present to give a few of the particulars of the six cases by M. Scoutetten. The first was a man aged 50; the operation performed in France; death by gradual sinking, four hours after the operation. The next are three deaths in England; viz., Thomas Herbert, Ann Parkinson, Albin Burfitt—the last a patient 11 years of age; the fatal result three hours after the operation. The fifth, Dolores Lopez, a man of 50, occurred in Spain; the death seven hours after the operation. The sixth, a man in France, 55 years of age; death instantaneous, from inhaling ether. All these accidents occurred in the year 1847, when ether was being universally used or experimented with. Three other cases also occurred before this year.

"It is interesting now also to know that in this year (1847) not less than 208 operations successfully performed under ether are mentioned by Burquières of Paris, 211 by another surgeon, 80 by Dr. Snow, and so on —509 in all; so that it was having a fair trial. But then chloroform came in, and ether was eclipsed for a time. I went myself to Paris about this period, sent by the *Medical Times*, to observe chloroform and 1600 wounded soldiers; so that I saw and heard of both.

"It may be argued that these deaths were from want of skill in its early administration. I don't think so. I have looked, however, through my later notes, and I find several deaths of a like kind of late years. Two most decided cases of death from inhaling ether in 1858, by MM. Barrier and Valette of Lyons; a case by Dr. Alonzo Clark, a woman. 'Voluntary respiration ceased,' he says; 'the woman's countenance became livid, the pulse rapid; she was carried to a window;' but at the end of twenty minutes she was dead.

"I need not refer in detail here to two others by M. Jobert, about this period; or eight problematical cases in Ireland, mentioned by Pickford; or three deaths in Beck and Christison, persons poisoned by vapour of ether, where bottles had broken in close apartments in doctors' houses—the persons found quite dead. But these two cases of M. Jobert and the following are quite reliable. Thus M. Giraldès, recently in London, met a case of death from ether not long ago. M. Velpeau had a patient with enlarged tonsil, on removing which by excision, the patient deeply anæsthetic from ether, 'blood collected in the throat; the reflex function of the part was so destroyed, suffocation followed'. In the late case in America, also, there was, though without hæmorrhage, this extreme muscular relaxation, coma, exhaustion, intermittent pulse, etc., so characteristic of these accidents, as I stated at Oxford, at the last meeting of the British Association; so that, if we now add to these seventeen deaths the large number of nineteen collected by M. Trousseau, we have the very serious fact of thirty-six deaths from sulphuric ether.

"I remain, etc., Charles Kidd, M.D.

"London, May 1861."

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......	Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.
TUESDAY.	Guy's, 1½ P.M.—Westminster, 2 P.M.
WEDNESDAY...	St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.
THURSDAY.....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.
FRIDAY.......	Westminster Ophthalmic, 1·30 P.M.
SATURDAY.....	St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY. Royal Geographical, 8.30: Despatch from Dr. Livingstone, dated February 9th, 1861, containing Dr. Kirk's report on the Botany, etc., of the Regions of the Zambesi.

TUESDAY. Royal College of Surgeons, 4 P.M.: Mr. Hilton, "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."—Royal Medical and Chirurgical: Ballot at 8 P.M.; 8.30 P.M., Mr. Oliver Pemberton (of Birmingham), "On a Case of Aneurismal Varix": Dr. W. F. Wade (of Birmingham), "On a Case of Aortic Aneurism."

WEDNESDAY. Meteorological (Anniversary).—Microscopical.—Royal Society of Literature.—North London Medical, 8 P.M.

THURSDAY. Royal College of Surgeons, 4 P.M.: Mr. Hilton, "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."—Royal.—Antiquarian.

FRIDAY. Astronomical.

SATURDAY. Asiatic.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JUNE 1, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week....................	Boys .. 972 Girls .. 987	1959	1069
Average of corresponding weeks 1851-60		1523	1118

Barometer:
Highest (Mon.) 29.930; lowest (Sat.) 29.680; mean 29.809

Thermometer:
Highest in sun—extremes (Th.) 125 degs.; (Tu.) 66 degs.
In shade—highest (Th.) 75.3 degrees; lowest (Sun.) 49.7 degrees.
Mean—57.5 degrees; difference from mean of 43 yrs.+2 degs.
Range—during week, 25.6 degrees; mean daily, 18.5 degrees.

Mean humidity of air (*saturation*=100), 71.

Mean direction of wind, Var.—Rain in inches, 0.32.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

BUTTERCUPS.—"The ranunculi were used as vesicatories, before the introduction of cantharides. Applied externally, the ranunculus inflames and blisters; for this purpose, the leaves are well bruised and applied, having this advantage over the flies, not affecting the urinary passages; but as its action is uncertain, and as instances are recorded of its *producing ill conditioned ulcers*, it is not employed in this country. It is a well known fact, that soldiers and mendicants often resort to these plants—the former to procure their discharge, the latter to excite commiseration. Withering recommends the distilled water of the plant as an emetic in cases of poisoning or other circumstances, where an instantaneous vomit is desirable: he says it does not excite those painful contractions of the stomach which zinci sulph. sometimes does." [Dr. F. Collins, who sends us the above quotation (he does not say from what work), adds:—"Mr. Garraway will see he has been anticipated."]

MR. F. H. HARTSHORNE sends us the following interesting and unusual case of lactation. The following case of lactation appears to me remarkable; and believing that it may be not without interest to some of our professional brethren, I have made the following note of it. The wife of an agricultural labourer has had eight children; the youngest is now eight years old, having been weaned at the age of sixteen months. Three months ago, a daughter gave birth to an illegitimate child, which could not be made to suck its mother's breast; therefore the grandmother, "to comfort it", applied the infant to her own breast: it directly fastened to the nipple, and has since that time continued to derive most of its sustenance from her, only occasionally being fed with a spoon. The woman has now a free flow of milk, of good quality; and states that, when she is anxious about the child, she feels a "rush of milk" in her breasts, as if it were her own offspring. Her age is forty-five years, and her health good; the only illness that she remembers having had, appears to have been menorrhagia. The catamenia first appeared when she was eleven years old (she was then a servant in a farm-house), and has been regular since she weaned her last child; from that time until she applied her daughter's child to her breasts on the night of its birth, she never noticed any milk in her breasts. The child thrives, and is healthy, and its mother has returned to service.

A SUBSCRIBER.—The boards for binding the JOURNAL of 1860 can be obtained at the office.

SUBSCRIPTIONS.

THE following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, June 1861.

COMMUNICATIONS have been received from:—Dr. EDWARD L. FOX; Mr. D. KENT JONES; Mr. C. B. RENDLE; Mr. JOHN GAY; Dr. F. H. HEWITT; Dr. F. COLLINS; Dr. THOMAS SKINNER; Mr. F. H. HARTSHORNE; Dr. DAVID NELSON; Dr. KIDD; Dr. M'WILLIAM; Mr. W. C. MATTHEWS; Mr. G. RIGDEN; Dr. J. H. JACKSON; Mr. T. M. STONE; Mr. A. SQUIRE; Dr. O. WARD; Dr. BRYAN; and Mr. BICKERTON.

BOOKS RECEIVED.

1. The Anglo-Turkish Bath; or, the Modern Application of the Ancient Roman Therma as a Hygienic, Prophylactic, and Therapeutic Agent. By York J. Moore, M.R.C.S. London and Torquay: 1861.
2. Ourselves, our Food, and our Physic. By Benjamin Ridge, M.D. London: 1861.
3. Another Letter to a Young Physician. By James Jackson, M.D. Boston: 1861.
4. Lectures on the Diseases of the Kidney, generally known as Bright's Disease. By S. J. Goodfellow, M.D. London: 1861.
5. Tubercular Leprosy. By Dr. Abercrombie.
6. Manual of the Practice of Medicine. By T. H. Tanner, M.D. Fourth edition. London: 1861.
7. The Prevention of Spinal Deformities. By M. Roth, M.D. London: 1861.

Original Communications.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

By Augustin Prichard, Esq., Surgeon, Clifton, Bristol.

V.—Operations on the Eye.

[*Continued from page* 521.]

Mixed Cases. To conclude my series of operations undertaken for the restoration of sight, I have brought together, under the head of *mixed* cases, a few instances in each of which several operations were performed; namely, the formation of artificial pupil, with the extraction of cataract or opaque capsule; and they could not very conveniently be arranged with the others. Some are cases of considerable interest, and very successful.

Case ccccviii. F., aged 61, had the lower part of each cornea opaque, and opaque capsule in the left eye, with dulness of the right eye. She could not find her way about. I operated on both, and succeeded in clearing the right pupil of the dulness, with the exception of a portion of capsule. At a second operation, I made a free corneal section downwards; and, not being able to withdraw the capsule, I removed a portion of iris, and extracted with some difficulty a yellow opaque lens. From this operation she recovered sufficient sight to see to go about readily. After a time, her sight became more dim; and I enlarged the pupil, so as to bring it opposite a clear part of the cornea; but it did not succeed; and, although the pupil was made, she went home with her vision very indistinct.

Case ccccix. M., aged 30, had amaurosis of the left eye, and met with an injury of the right, by which the cornea had been opened, the pupil drawn down to the scar, and the capsule opaque. I made at the first operation an opening through the iris, and found an opaque lens behind. When the eye recovered, I extracted the cataract without difficulty. He had considerable headache afterwards, and for this he was bled; and, when he was quite well, I found some capsule obstructing the artificial pupil. This I removed by a needle-operation; and he went out with fair sight, able to drive a donkey-cart about the city.

Case ccccx. M., aged 8, a healthy-looking red-cheeked boy, was unlucky enough to have his left eye destroyed by a piece of crockery ware and the right by an arrow. The former is quite opaque; and in the latter the iris is adherent to a transverse opaque line across the cornea, and the pupil is almost closed and blocked up with opaque capsule. I introduced a needle behind the iris, and tried to remove the capsule; but in vain, for it was too firmly adherent, and the lens was behind. Upon a subsequent occasion I gave him chloroform, and removed a portion of the iris, when the opaque lens became visible. A little vitreous humour escaped.

I subsequently operated on this little boy three times more. At the third operation, I introduced a needle through the sclerotic, and tried to draw back some opaque matter which occupied the upper part of the eye. At the fourth, I divided the iris with the iris-knife, under chloroform; and at the fifth and last I repeated the section without chloroform. His sight improved gradually; and now he can see to go about everywhere, and distinguish objects, and with a lens can see letters. This termination was very satisfactory, considering that the patient had not as much as half an anterior chamber available for all these operations.

Case ccccxi. M., aged 40, injured his left eye by accident, and for ten weeks following suffered much from inflammation. When I saw him, about ten months afterwards, he had adherent iris and capsule and opaque lens in each, and he was blind. I began by making an upper corneal section in the right eye, breaking the capsule, and trying to extract the lens. It was necessary to snip the edge of the pupil with a pair of scissors before I could dislodge it; and, after all, I was obliged to pass in the curette and lift it out, which I did, leaving a clear black pupil, but no sight. At a *second operation*, this pupil having closed partly, I incised it; but he could see no better, and went home; and six years afterwards, when I saw him again, the right eye had gradually become atrophied and sunk, whilst the left looked stronger. On the third operation, I made a lower corneal section in the left eye (in which the original accident had occurred); and, after trying once or twice to withdraw some iris from the eye, which I could not do because it was soft and gave way readily, I withdrew the capsule, and, seeing the lens opaque behind, I enlarged my corneal incision, and turned it out. Some vitreous humour escaped at the same time, and the eye during the operation had become very vascular and painful. He recovered fairly; and the iris lost its discoloration, and the eye became much more sound. He could see to go about anywhere, and his health improved greatly.

Case ccccxii. M., aged 21, a feeble emaciated youth, came under my care in 1856, with acute iritis of both eyes. The disease was apparently of a strumous nature, and had existed three weeks when I saw him, when he had pus in the lower part of each anterior chamber, corneal opacity and lymph on the iris in the right eye, with purulent deposit in the upper part of the anterior chamber in the left eye. I have seldom seen so destructive a case. He grew progressively worse, and partial sloughing took place; and, when he recovered his health, he could barely distinguish light from darkness. Two years afterwards, his right eye had about the upper half of the cornea clear, but no pupil; and the left eye was flat. At the *first* operation, I made an artificial pupil in the upper and outer part of the right eye, and discovered a cataract behind; and as the poor fellow, who worked to support his mother, had only the chance of sight in this mutilated eye, I allowed it to heal, and, after a time, performed a *second* operation, which consisted in the removal of the cataract through an upper corneal section. This did well, and he recovered a fair amount of sight, and was able to work for a time; but, after a few months, the pupil became blocked up with opaque capsule, and his sight was very indistinct. The *third* operation consisted in removing the capsule through a corneal section; and it was accomplished readily, but was followed by some inflammation; and his pupil became closed. At the *fourth* operation, I cut across the iris with an iris-knife, and made a good pupil, through which he saw well for a minute or two, when blood was effused, and obscured the vision. After this he recovered partial sight, so as to be able to get about; but his pupil was not satisfactorily clear; and therefore, for the *fifth* time, I operated, and removed by a needle some opaque matter which occupied part of the pupil, and he regained his sight. He now sees very fairly with a four-and-a-half-inch lens, and his health is much improved.

Case ccccxiii. M., aged 55. (I introduce this case from the similarity in its origin to the last.) The patient was, for his age, an old-looking man, weak and ill, with pus in the anterior chamber of the right eye, following an abscess in the cornea of a month's standing, which gave way internally. The pus increased in spite of treatment, until it had reached above the margin of the pupil, giving a dull appearance to the capsule. He could make out the light from darkness, but could not distinguish the bars of the window-frame with this eye. I made a lower corneal section, to get rid of the pus; but it was very thick, and did not escape readily with the aqueous humour; and he went home with no sight in this eye, the left being good.

Exactly a year afterwards, this patient came up again with the same condition in the left eye, namely, an internal abscess discharging into the anterior chamber; but the other eye had become strong, and in it the lower half of the cornea was completely opaque, the iris adherent to it; and a similar oval pupil existed just above the corneal capacity, and he saw tolerably well. The progress of the disease in the second eye was like the first. I made a section, to save the organ. He went home entirely dependent on the sight in the right eye (that first affected); and when I saw him for some other ailment, three years after, the left eye was exactly like the right, with corneal opacity, adhesion, and minute oval pupil, with very good sight. There was an unusual degree of parallelism in the origin, treatment, and result of the disease in these two eyes.

Case ccccxiv. F., aged 52. I began the treatment of this patient as long ago as the beginning of the year 1857, when she had been blind with the left eye for fifteen years, and the right for one year. In both there was closed pupil, adherent iris and capsule, with lymph occupying the position of the pupil.

I made, first of all, an artificial pupil in the left eye, by removing a part of the iris at the lower and outer corner of the anterior chamber through a corneal section; and she saw better afterwards, but not well, for the lens was opaque. At the *second* operation, I made an artificial pupil in the other eye; and she went out with more sight, and a good sized aperture in each iris. Some months afterwards, I extracted the left lens by a lower corneal section. A little vitreous humour followed, and the cataract was very dark. She recovered fairly, with a very small pupil, but sight enough for her ordinary domestic work. A *fourth* operation was performed a few months afterwards, when I removed the cataract from the right eye, and she obtained some sight in it, but it was imperfect. She managed, however, to get on comfortably for eighteen months, when she reappeared, blind once more. The right eye had an indistinct pupil in it, partially occupied by opaque capsule; and the small pupil that existed in the left eye had become too contracted for useful sight. I therefore, on the fifth operation, made a cut across the iris of this eye with the iris-knife, and she regained excellent sight instantaneously. The pupil thus made became gradually almost round; and I supplied her with a two and a half and a four and a half inch glass, with which she saw very well.

Remarks. The operations for artificial pupil, although generally performed upon damaged eyes, are, on the whole, very satisfactory and successful. No regular and systematic directions can be given as to the mode of operation, and the surgeon must act in each particular case according to its special peculiarities, remembering that a hole is to be made in the iris opposite a clear part of the cornea; and, of course, the nearer to the centre the better. The actual plan to be pursued can only be decided after the first step of making a corneal section has been taken. The exception is in the case of closed pupil after the extraction of cataract; for there, a cut with the fine iris-knife will restore sight as if by magic; and, if the incision be expertly made in the middle of the iris, the pupil attains a wonderful degree of roundness.

I have no experience of a plan recommended some time ago, according to which a piece of iris was to be tied at the edge of the cornea; nor can I understand how it can have any advantage over other modes of proceeding.

A perusal of the foregoing cases (from No. 359 to 414) will also shew some other points of interest. Probably twenty of them were blind of both eyes, because one had been injured; and to this I will add my belief that, in any of these, extirpation of the injured organ would have saved the other; and the examination of similar cases at the Bristol Blind Asylum originally suggested the idea of excising the damaged eye.

When the cornea has been opaque from inflammation or accident, and has afterwards cleared, and a section is made in it for the purpose of making an artificial pupil or removing opaque matter, it will become cloudy again after the operation, and in time will be restored to its former transparency; but this is a work of some time, and many cases then turn out better than they promised, and are supposed to do, because they cannot be kept under the surgeon's care sufficiently long.

When the cornea sloughs, and the pupil is closed from small-pox or purulent ophthalmia, the lens generally becomes opaque also; and when a stain of blood is left on the knife after making a section of the cornea, the cases invariably do badly from inflammation or sloughing.

The late Mr. Estlin of this city read a paper upon injuries to the iris, at one of our annual meetings, at Leeds, and he showed how little it resents injuries inflicted upon it, either by accident or the surgeon's hand. In that paper, he describes the operation I have alluded to, of dividing the iris by the "iris-knife," a fine narrow blade, scarcely wider than a needle, which is introduced across the anterior chamber, and then its edge being turned towards the iris, a sudden movement of the hand runs it through the iris and withdraws it instantly. I have above narrated many cases where this little operation proved very successful. If there be an opportunity of selection, the cut should, of course, be made at right angles to the strained fibres of the iris, as thereby a larger, and somewhat circular, pupil is made.

Staphyloma. The operation for the relief of the irritation caused by staphyioma is not unfrequently called for, and is invariably successful. I will describe a few, of which I have preserved some notes, and they will be sufficient to indicate the progress of such cases.

Case ccccxv. F., aged 17, with staphyloma of the right eye from an injury. I removed it, and a clot formed, and after a certain amount of suppuration, the part healed. Her eye was unusually sunken afterwards; but an artificial eye was introduced.

Case ccccxvi. M., aged 3, with staphyloma of the right eye, of eighteen months standing. With tenaculum and knife, I removed the cornea, and some vitreous humour followed. The lens did not come out. The child was taken home on the sixth day with the wound almost healed.

Case ccccxvii. F., aged 17. Her right eye was opaque, the left very prominent. I removed the front of it with a tenaculum and knife, and the lens and some vitreous humour followed the section. There was a little hæmorrhage. She complained immediately of great pain in the head, which lasted a few days; the eye slowly contracted and did well.

Case ccccxviii. Aged 4 months, with staphyloma of the left eye after purulent ophthalmia. The vitreous humour gushed out, and the eye looked collapsed immediately the anterior part was removed, and some little hæmorrhage followed. A compress and bandage was applied. The wound was healed in eleven days.

Case ccccxix. M., aged 18, with staphyloma of the right eye. A week before I saw him, as he was blowing his nose, sudden pain came on in this eye. I removed the front of the eye; and it appeared that a hard chalky lens had escaped into the anterior chamber and had produced the irritation. Some healthy vitreous humour escaped with the lens, and it was necessary to divide the hyaloid membrane with a scissors. There was a little hæmorrhage, but he soon recovered.

Case ccccxx. M., aged 10. I removed the cornea with a tenaculum and scalpel. The vitreous humour did not escape at first; but in puncturing the clear surface of it with the point of the knife, it gushed out suddenly, and the eye became collapsed. He recovered speedily.

Case ccccxxi. M., aged 11. (I operated on this patient under chloroform; all the previous ones were without.) I removed the cornea, and the iris, which was adherent to it, and the lens followed. He recovered immediately.

Case ccccxxii. F., aged 13 months, with staphyloma of the left eye from birth. The cornea (very much thickened), and the iris adherent to it, with the lens and some vitreous humour, were removed, and the wound healed at once.

Case ccccxxiii. F., aged 22, an otherwise good-looking young woman, with very prominent eyes. I operated under chloroform; and passing a needle and thread through the cornea, removed it, with the lens and some vitreous humour. A clot ultimately formed in the eye, and was discharged, and she recovered well. She called upon me sometime afterwards with an artificial eye, and it was difficult to recognise her.

Case ccccxxiv. F., aged 11. I operated without chloroform, removing, by tenaculum and knife, the cornea and iris, and some vitreous humour. She was soon cured.

Case ccccxxv. M., with staphyloma of the right eye. The irritation kept his left eye weak. With tenaculum and knife, I removed the cornea. There was an unusually free flow of blood, and after a day or two a clot projected from the eye. The case did very well.

Case ccccxxvi. M., aged 30. I operated under chloroform; and as another plan had been recommended, I tried it in this case. With a strong silk, I tied up his cornea by the (so-called) Fergusson's knot—*i.e.*, a double figure-of-eight knot—and punctured it as well. He suffered more pain than is usual after these operations; but the case did perfectly well.

Case ccccxxvii. M., aged 4½. In this, and other subsequent operations, I returned to the old plan, and removed the cornea and iris, with the aid of the tenaculum and knife. The mother took the child home, and when I saw it, in a few days time, acute inflammation and suppuration, with severe constitutional disturbance, were set up, which afterwards subsided, and the case did very well.

Remarks. I believe that, in performing this disagreeable operation, the old plan of simply cutting off the projecting part is the best. During the time that I was surgeon to the Blind Asylum here, I operated on a considerable number of such cases; but I have no particular record of them. I found, not unfrequently, that the patients, seeing a great glare of light streaming through the vitreous humour, after the removal of an opaque cornea, were much disappointed that they did not recover any sight. There are two symptoms following operations on the eye, of very constant occurrence, and very painful to the patient, and unmanageable: they are the vomiting (in young subjects particularly) which follows needle operations for cataract, and the intense pain at the back of the head and brow, which follows equally frequently the operation for staphyloma, particularly if much vitreous humour have escaped. I cannot explain the pathology of these symptoms; nor do I know how to treat them with full confidence of cure. Opium does not answer our expectations in such cases. I have formerly bled adults from the arm, and this plan seemed most effectual. It is important to get rid of the lens in staphyloma operations.

[*To be continued.*]

FERRI CARBONAS EFFERVESCENS: A NEW AND ELEGANT FORM OF CHALYBEATE.

By Thomas Skinner, M.D., Obstetric Physician to the Liverpool Dispensaries, Fellow of the Obstetrical Society of London, etc.

Believing that the protocarbonate of iron, even in a solid state, is one of the best preparations we can administer in the thousand and one diseased conditions in which chalybeates prove useful, and that its present officinal preparations are incapable of preserving it from decomposition for any reasonable length of time, I have long thought it a desideratum to obtain it nascent, and in a soluble form, at the time of ingestion. I am now happy to state that, after a great deal of trouble and experimenting, both by myself and by various experienced chemists, I have, at last, succeeded in obtaining the protocarbonate in the permanent and elegant form of an effervescing granular powder.

Formula and Process of Preparation. The effervescing carbonate of iron is made as follows:—

℞ Acidi tartarici ℥iij; sodæ bicarbonatis ℥v; ferri sulphatis ʒx; pulveris sacchari ℥j ʒvj; acidi citrici ʒij.

1. Mix the sulphate of iron with the sugar and part of the tartaric acid. 2. Mix the citric acid with the remainder of the tartaric acid and the bicarbonate of soda. 3. Add the mixtures, and thoroughly incorporate them by sifting. 4. The whole is now to be thrown into a metallic pan set in a water bath; in a few minutes it will separate, when it should be rapidly stirred until granules are formed. If preferred, it may then be flavoured with oil of lemon; hitherto, however, the preparation has been without it.

Physical and other Properties. When the above is carefully prepared, it has all the appearance of the popular and well known granular effervescent citrate of magnesia, with the addition of a slight yellowish green tint. Every drachm and a half contains ten grains of sulphate of iron, which, with a complement of bicarbonate of soda, is certain to produce, in a state of solution, four grains of nascent protocarbonate of iron. At the same time, there is developed a tartrate with a little citrate and sulphate of soda, which is, if anything, an advantage, as they act the part of a very gentle saline aperient, obviating the usual astringent effect of preparations of iron, as well as the too frequent constipation attending cases requiring chalybeates, particularly amongst females. The taste of it depends very much upon the amount of dilution. When taken in the dose and manner hereinafter recommended, the taste is that of a mild, sparkling, and refreshing chalybeate.

After the effervescence subsides, a perfectly clear, light-green solution remains, which, if allowed to stand for some time, becomes of a deeper green colour on the surface, gradually increasing from above downwards, and floating like a cloud upon the upper stratum of the liquid. This appearance was at first mistaken for oxidation, but the more correct explanation seems to be that it is the carbonate of iron which was retained in solution by excess of carbonic acid gas; that, as the excess escapes from the surface, the carbonate separates from the solution in the form of a fine cloud and becomes ultimately precipitated in the form of an impalpable powder. So far as permanency is concerned, the preparation has stood the test of several months, and it now remains as good as the day when it was made.

Dose, Uses, Mode of Administration, etc. The dose is a teaspoonful, more or less (about a drachm or a drachm and a half), twice or thrice a day, in half a tumbler or more of water, an hour after, between meals, or upon an empty stomach, as is found most suitable. Dilution, within reasonable bounds, increases the tolerance of the remedy and favours its therapeutic action. It may be drank during the action of effervescence, but it seems to me preferable immediately after it subsides. When a prolonged course of iron is required this preparation will never take the place of the protosulphate, the iodide, or the sesquichloride; but where a moderate course of a few days, or a week or two, is necessary, it will be well borne by the stomach. It is not only well borne, but it seems to produce a much more manifest chalybeate effect within a given time and in a smaller dose, than any other preparation of iron with which I have had experience.

In facial or other forms of neuralgia, arising from anæmia or other cause relievable by iron, and particularly if the bowels are at all torpid, a few doses often act like a specific. It ought, however, to be continued after the pain disappears, so as entirely to remove the condition upon which the neuralgia depends. I may remark that the quantity of iron, and the aperient effect might be doubled if required; the present proportions, however, have been found by experience to be the best for ordinary purposes.

The pharmaceutist who has prepared this effervescent chalybeate for me, and who deserves great credit for the perfection to which he has brought it, is Mr. Banner, chemist, 4, Hardman Street, Liverpool.

Let me add, in conclusion, that in prescribing chalybeates in general, particularly for those who are fastidious about the colour of their teeth, I am in the habit of ordering at the same time the following wash to be used with a toothbrush morning and evening, or after each dose:—

℞ Potassæ quadroxalatis ʒss; aquæ rosæ ℥vj. Solve. After the use of this the mouth should be rinsed with cold or tepid water.

Transactions of Branches.

MIDLAND BRANCH.

AMPUTATION THROUGH THE KNEE-JOINT.

By A. H. Dolman, Esq.

[*Read June 28th, 1860.*]

The following case of amputation through the knee-joint, consequent upon an injury to the leg by the wheel of a locomotive, appears to me sufficiently interesting and important to occupy your attention for a short time.

For several months I have been impressed with the notion, that amputations through joints have perhaps been, to some extent, unnecessarily avoided by many surgeons. The reasons that led me to the consideration of the subject are these. In the course of a very large experience in removing fingers, I have frequently observed that the stumps healed more rapidly when amputated through the joint, than when the bone was nipped or sawn through. I have had, moreover, several opportunities of observing the same fact in amputations of the wrist. These latter were primary operations, in consequence of injury to the hand; and all the cases did well, and healed chiefly by first intention. Convinced as I am, by these observations on the smaller joints, of the safety of operating through the articulation, I would ask, Why should it not be right to try the same method on the larger limbs in properly selected cases?

From an eight years intimate connexion with hospital practice, I can call to mind many instances of injury to the leg, in which this operation would have been practicable, but where amputation of the thigh has been resorted to, the fatality of which is most alarming. Of course it is very seldom that operation through the knee would be advisable in *disease* of the lower extremities, as the joint itself is so frequently affected. The cases to which this method is, in my opinion, more especially applicable, are those in which we find injury to the leg, necessitating amputation, but too high up to leave the chance of saving any useful portion below the knee. Erichsen and Miller describe the operation, and recommend a long posterior flap to be made, but appear to judge somewhat unfavourably of its safety or utility. In the case I am about to report, the flap was taken from the anterior surface of the leg, and the patella was not disturbed. This, I think, is an important point; as, in the first place, there is left for a covering to the stump a portion of integument accustomed to pressure; and, in the second, all protraction of the operation by division of the muscles, in dissecting out the patella, is avoided.

With your permission, I will now mention a few of the advantages of this operation, in properly selected cases, over that of amputation of the thigh.

The limb is removed at a greater distance from the trunk, and consequently with less risk to life; there is a much smaller wound, and therefore much less demand upon the reparative powers; much less muscular structure is divided, and therefore the chance of rapid healing is much greater. In general fewer arteries will be severed, and therefore fewer ligatures will be required, and the subsequent irritation will be less; the bone being uninjured, liability to exfoliation will be lessened. The greater length of the stump would also make it more useful, and suitable for the adaptation of an artificial limb. As very few muscles are divided, the motions of the stump would be less interfered with; besides which, there would be less liability to inflammation of the fascia and intermuscular septa. The comparatively small number of nerves would lead us to expect the stump to be less sensitive. There would be no danger of conical stump. There is less pain attending the dressings. And, lastly, there is a strong probability that such a stump would be able to bear pressure on the end.

I read the report of the case as furnished by the dresser, Mr. A. Hancock.

John Milward, aged 26, railway guard, was admitted into the Derby Infirmary, April 11th, at a quarter past twelve A.M., under the care of Mr. Whitaker Johnson. Whilst he was employed in "shunting" some carriages, a train came up and knocked him down, the wheels passing over both legs, completely crushing them. The right thigh was severely contused, the left slightly so; there was also a bruise on the forehead, but apparently of no consequence. On his admission, the heart's action was feeble, and the surface cold. Brandy was freely administered, after which he somewhat revived. Mr. Johnson was sent for, but, he being unwell at the time, Mr. Fearn kindly officiated for him. The patient having been placed under the influence of chloroform, the left leg was first operated upon, being removed immediately below the knee-joint, by means of a long posterior and a short anterior flap. Four ligatures were employed, and the flaps were brought together by iron wire sutures and strips of plaster, after which a bandage was lightly applied. At the conclusion of this operation, he recovered in a great measure from the effects of the chloroform, and was faint. Brandy was given with good results; and, after waiting a short time, he was again placed under chloroform, and the right leg was removed at the knee-joint, by means of a long anterior and short posterior flap, the patella being left. Four ligatures were used, and the flaps were brought together in the same manner as those of the left leg. After the operation he was exceedingly faint; so much so, that he was not lifted into bed, but covered upon the stretcher. Brandy was again freely administered.

10 A.M. He had had some sickness; but had slept, and seemed rallied. He was placed in bed.

1·30 p.m. He suffered a great deal of pain, and half a grain of morphia was given immediately. After this he went on in a satisfactory way, except that he had some diarrhœa on the 18th.

April 20th, 1 a.m. Mr. Dolman, the house-surgeon, was called to him, on account of some bleeding from the left stump, which, however, stopped spontaneously. The course of the femoral artery was marked with ink, and instructions given as to applying pressure should the hæmorrhage recur.

April 24th, 4 a.m. Hæmorrhage again came on, more profusely than on the previous occasion. Signoroni's tourniquet was employed to compress the femoral artery.

6 a.m. As bleeding occurred the instant the pressure was removed, and the thigh was becoming tense and painful, Mr. Johnson was sent for; but, he being from home, Mr. Fearn was again called in, and it was thought right to tie the femoral artery, which was accordingly done at the upper third. The wound was sewn up with iron wire, and strapping applied.

12 noon. There had been no more hæmorrhage. The man looked pale and was very feeble. He was ordered:

℞ Tinct. ferri sesquichlorid. ♏xij; liq. opii sedativ. ♏v; spt. æther. sulph. ♏xv; decocti cinchonæ ℥j. M. Fiat haustus quartis horis sumendus.

April 22nd. He had constant diarrhœa; and was ordered to take an astringent draught composed of chalk mixture, tincture of catechu, etc., every three hours.

April 23rd. Both stumps were dressed, and several of the sutures were removed. A large slough fell from the left stump. The diarrhœa was still troublesome. Five minims of laudanum were added to each dose of the mixture. He was ordered to have wine *ad libitum*, to omit the porter, to take brandy and gruel to drink. The iron mixture did not agree with him.

April 25th. The stumps and the wound over the artery were dressed, and were looking well.

May 1st. The remaining sutures were removed.

May 3rd. There was slight ulceration on the posterior aspect of the left stump, probably from pressure. The right thigh was much swollen, and there was an obscure feeling of fluctuation. An exploring needle was introduced about two inches deep on the outer side, and, on being withdrawn, pus was seen in the groove. Mr. Fearn then made an incision through the deep fascia, and let out about four ounces of pus. A tent was placed in the wound, and a linseed poultice ordered.

May 11th. A large quantity of offensive purulent discharge escaped from the left thigh, through a sinus communicating with the outer side of the stump.

May 13th. The ligature on the femoral artery fell. The wound looked glassy and pale. He had a great deal of pain over the left knee-joint; and there was a large abscess on the outer side of the stump, extending up the thigh. A bread poultice was ordered. The right stump looked better; but there was a little protrusion of the outer condyle, and a very exhausting discharge from the subfascial abscess.

May 15th. His back was rather sore. A water pillow was tried, but he could not bear it.

He drank daily a bottle of bitter beer, a pint of porter, four ounces of port wine, two ounces of brandy, and a little small beer.

May 19th. Wet lint was applied to the right stump.

May 21st. The stumps were looking pretty well, but the granulations were pale. Compound tincture of benzoin was applied on strips of lint.

May 24th. The first ligature fell from the right stump, There was evidently a considerable collection of pus over the inner aspect of the left knee.

May 25th. A ligature fell from the left stump. There was a large sore over the sacrum, to which soap plaster was applied. He would not have an air-cushion. He was removed into a bed near the window.

May 26th. He was better to-day; said the sight of the adjoining grounds seemed to "cheer him up". He was persuaded to try the air-cushion.

May 27th. The right thigh still discharged profusely from the deep abscess. It may, perhaps, be as well to mention, that this thigh was injured some time previous to the present accident; and on that occasion there was a large troublesome abscess, but no fracture was detected. The left stump had discharged a great quantity during the night, the pus having come from the abscess noticed on the 24th inst. His back was more comfortable, and the sore had a better appearance.

May 29th. A ligature fell from the right stump. There was no decrease in the amount of the discharge from either stump; and that from the right one was coffee-coloured, and very offensive.

May 31st. The left stump looked better. The remaining ligatures were very fast.

June 2nd. The ligature on the main vessel in the right stump fell to-day, and also a ligature from the left stump. There was an inflamed spot immediately above the outer condyle of the right stump; the skin was very thin; and, when pressure was applied here, pus escaped at the wound six inches above.

June 6th. Both stumps and the back were dressed. Two ligatures fell to-day, one from each stump. Mr. Dolman opened the abscess on the outer side of the right stump, noticed at last date, and a large quantity of pus mixed with clots escaped.

June 8th. The right thigh was bandaged from the groin downwards. The pus was of a more healthy character. There was no pain about the left stump, which was healing nicely.

June 9th. The last ligature fell, having remained in the stump fifty-nine days.

June 11th. Some effervescing medicine, with ammonia and quinine, which he had been taking since May 1st, was omitted, and tincture of sesquichloride of iron in infusion of calumba was prescribed. This, however, did not agree with him; and a mixture of carbonates of magnesia and soda with tinctures of cardamoms and lavender was prescribed.

June 23rd and 25th. He had diarrhœa, for which an astringent mixture was ordered.

June 27th. He was better. The sore over the right outer condyle looked languid, but there was no bone exposed. The nitric acid lotion was ordered to be applied every morning. He could now raise this thigh without any assistance, and could move the left one about very freely.

July 14th. He was discharged.

The man subsequently went to London to be fitted with artificial legs; but, unfortunately, I have not seen him since.

Laying the First Stone of the Jews' Hospital at Norwood. The ceremony of laying the first stone of the Jews' Hospital, at Lower Norwood, was performed last week by Sir Anthony Rothschild, Bart., in presence of a very numerous assemblage. The institution is destined to be a *rénaissance* of the venerable hospital at Mile-end, one of the earliest charitable institutions of Jews in England. This building, besides the fact that it was never very well adapted to its purpose, is now in a state of some dilapidation. As soon as it became a matter resolved upon that a more commodious edifice should be erected, there were not wanting friends ready to emulate the example of the original founders of the charity; and more than one offer of land was made for a site on which to found the new building. Mr. and Mrs. Barnett Meyers have given eight acres, in the most advantageous part of Lower Norwood, for this purpose. The ground lies a little off the road, opposite the railway station, on a commanding rise, and is at once picturesquely and salubriously situated.

Abstract

OF A PAPER

ON DENTITION.

By A. Jacobi, M.D., of New York.

[The following is an extract, bearing upon a curious subject, from a lecture by Dr. Jacobi, published in the *American Medical Times.*]

The younger Pliny states that the renowned Marcus Curius, consul of the Roman republic two hundred and seventy years before our era, had a full set of teeth at birth. This was the reason of his being named Dentatus. The same author mentions the case of Papyrius, and of a lady, named Valeria, who had all their teeth at birth. Zoroaster, the Persian legislator, is also reported to have had all his teeth at birth. The old historians, from whom Weinrich took the facts, probably thought he was destined to become the exponent of wisdom and morals, from being so extraordinarily and precociously gifted. Louis XIV of France, whom some writers call the great, because he lived contemporaneously with some great men of his country, was born with two teeth; as was also his Secretary of State, Cardinal Mazarin. The celebrated Grotius, who then lived in France, prophesied that the royal baby would prove a dangerous character, and that like the nipples of his wet-nurses, bleeding and torn by the voracious infant, the neighbouring sovereigns would be the subjects of the depredations and robberies of the future king. Scottus, in his *Physiologia curiosa*, relates, from a report of Niremberg's, the case of a Spanish dwarf, who had all his teeth when born, and never lost one of them, got a beard in his seventh, and had a son in his tenth year. Old Heister repeats the report of Kauliz, of a child, born with two incisors, which soon turned black; the child grew thin and emaciated, and died with rachitis when a year old. In Büchner's collections there is the case of an infant, twelve days old, who had teeth, and died soon after of a papulous and vesicular eruption, with consecutive desquamation (hereditary syphilis?). Lanzoni reports the case of a newborn infant with two rows of teeth.

We learn from Schurig, that Crausius observed two incisors in the lower jaw of a fœtus in the sixth month of utero-gestation. Schenk reports a similar case. It is stated in *Vita Peirescii*, that a woman gave birth to a child with long hair and teeth. Thomas Bartholinus is of the opinion that such congenital teeth are the cause of the vagitus uterinus. Güldenkiel reports the case of the daughter of Navinius, an officer at Camenz, who was born with two incisors. Helwich has several cases of boys born with teeth in the lower jaw; and Daniel Ludovicus relates the cases of newborn girls, having teeth in either jaw, and injuring their tongues by them. Similar cases have been reported by Johann Rhodius, Gœckel, Mazarinus, Simon Majolus, Alexander Benedictus, Hildanus, Balduinus, and Polydorus Virgilius.

Gensel reports the case of a boy who was born with two incisors. Shlenck, E. von Siebold, J. Ph. Horn, Mercklin, and Storch, have seen the like, without, however, mentioning the sex of the children. Vesti relates the case of his own daughter, who was born with a tooth. Detharding observed a tooth in a fœtus of six months; another in an infant three days old; and four teeth in a newborn infant. J. F. Lobstein gives the case of a child born twenty days after the ninth month of utero-gestation, with six incisors. Reveillé-Parise met with four canine teeth in an infant of four weeks, two of which had cut before birth; the development of the other teeth was equally precocious. Meissner saw two incisors in a newborn child, one of which fell out in the course of a few days; in another case the same thing happened, but a second tooth followed soon after, both of which were firmly imbedded in their alveoli and proved to be of the same nature as temporary teeth generally. Two incisors, observed in a newborn infant in the Paris foundling hospital, by Billard, fell out after six weeks. Mende observed two upper incisors in an infant; they were loose and movable, produced pain when touched; the mouth had an oblique direction, and the margins of the maxillæ were connected with each other. Although the teeth were extracted, the infant was unable to suck, and died of trismus on the fourth day after birth. Canton reports the case of a child, in the practice of Dr. Tomes, which was born with two teeth in the lower jaw, by which the breast of the mother had been injured. A similar case occurred in Canton's own practice. Brown mentions the case of a child born with the central incisors through the gums. They were extracted. Two other children were afterwards born of the same mother, in each of whom the same anomaly was found. All the children were females. The teeth were allowed to remain. Crump and Lethbridge have each observed a case of complete dentition at birth; the case of the former observer occurring in a still-born negro child. The sockets were very imperfectly formed. Baumès, while quoting the cases of congenital teeth observed by Columbus, Van Swieten, Marcellus Donatus, and Antigonus, reports the case of a French lady who bore a girl with two congenital incisors in the upper jaw, followed by two teeth on each side of the former, in the same jaw, three days afterwards. The infant died in convulsions. Richard III, and Mirabeau, the hero of the commencement of the great French revolution, had teeth when they were born. Similar cases are reported by Churchill, Fleming, Denman, while the celebrated Haller collected nineteen. I cannot conclude this long list without adding that Whitehead, the worthy professor and clinical teacher at Manchester, England, removed two teeth from the lower jaw of a newly born infant, in order to facilitate suckling. They were reproduced at the time when the canine teeth were formed, viz. after a year and a half, instead of the usual time of seven or eight months.

In Billard's opinion congenital teeth are not firm, but are liable to get loose, and be lost; but such is not the experience of Meissner and others. The last author is, as a rule, opposed to the advice of Billard, and the practice of Whitehead, of extracting such premature teeth when they prevent suckling. Meissner's opinion is, that no animal is prevented from sucking by the teeth in its mouth—a theory which is good enough for animals, but not for our race. Whitehead's case, in which it was necessary to remove a tooth to enable the mother to nurse the child, the fact that the nipples are very liable to become sore where the teeth are fully developed before weaning, and finally the few cases reported above, in which congenital teeth did not fall out to give place to the real temporary teeth, are valid proofs against such practice, at least in a number of cases.

Congenital teeth have been made the subject of special remarks by Dr. Nessel, professor of dental surgery at the University of Prague. As his opinions differ somewhat from others, I will state them more definitely. He removed congenital teeth in three cases. In his opinion, they are, properly speaking, not genuine teeth, as they differ greatly in substance and form, and especially in the nature and consistency of their exterior layer. They are less firm and solid, and their enamel is white, but thin, and not formed at all in some parts. They are not enclosed in the dental alveolus, but have a loose attachment merely to the gums. The real teeth will appear afterwards; and his impression is, that such precocious formations are principally observed in individuals who will show the symptoms of general scrofula in more advanced life. He therein coincides with *Capuron's* opinion, who always considers the premature appearance of teeth as a symptom of a morbid constitution. He removed them, not because of any inconvenience to the mother in nursing the infant, but because, in sucking, the tongue is brought forwards, and is liable to become sore and ulcerated from the continued contact. Some of Nessel's remarks correspond with Lassaignac's statements, who, by careful chemical investigations, found the teeth of younger animals to contain more organic matter than the older, as in the case of their bones; but he is certainly mistaken in regard to those congenital teeth which prove to be real temporary teeth.

Sometimes the teeth appear at a later period than the normal one. Van Swieten gives the case of a girl whose osseous system was well developed, and health perfect, but who had no teeth before the nineteenth month. Rayger relates the case of a girl who got her four temporary canine teeth when thirteen years old; Fauchard, that of a child from five to six years who had a few incisors only. Brouzet knew a child twelve years old who had but one half of the normal contingent set of teeth, the alveolar margin having the firmness and solidity of the gums of old age. Dugès has seen the first tooth appear in the eleventh, and Smellie in the twenty-first or twenty-second year. Lanzoni knew a child who had the first tooth, and the power of speaking intelligibly, in the seventh year. Ashburner reports the case of a very delicate though lively child, with large head, tumid abdomen, and peculiarly small-sized extremities, who cut the first tooth, an upper incisor, at twenty-two months, and remarks that many cases of tardy access of speech, and of stammering, are connected with erroneous development of the teeth. Schœpf Merei, who relates the case of a child who had the first tooth at three months, and eleven at eleven months, has seen a child who had no teeth when several years of age. Maury attended a girl of seven years, who had not her first lower incisors, the space being sufficient for three teeth, and the alveolar processes being low and narrow. I have had under observation a boy to the age of two years and ten months, at which time he had not a tooth, nor a symptom of approaching dentition. The records of the Children's Department of the German Dispensary of the City of New York contain a similar instance in a child of two years of age. Amongst the four hundred observations on dentition reported by Eichmann, there were a few in which the first tooth cut at twenty-two months, and in a case described by Churchill, the first tooth cut at seven years of age.

Rise of Learned Societies. One of the most important events in the history of modern medicine was the formation of the Royal Society of London, in the year 1645—the first medical society constituted out of Italy. In the eighth century, all learned societies were sacerdotal in their origin, being connected either with mosques, monasteries, or collegiate churches. In the thirteenth and fourteenth centuries they appeared as universities, yet under the protection and control of the church. In the sixteenth and seventeenth centuries, medicine had so widely extended its limits, that it required special institutions for its development. The theologians were still predominant in the universities, and fettered inquiry. Medicine wanted freedom. Hence, at the heighth of the great civil war, some of the most distinguished in the English medical world banded themselves with other investigators of nature, and established the Royal Society of London—"The head and home of modern medicine and natural science." At its foundation, practical and experimental medicine received its first impulse, and soon assumed its position as a distinct science, untrammelled by church or state. Kindred societies, purely medical in their character, were soon established, to *which* we owe much that has elevated and advanced our profession. (*Dr. Loomis.*)

Reviews and Notices.

Chemistry in its Relation to Physiology and Medicine. By George E. Day, M.A.Cant., M.D. London: 1861.

Organic chemistry, during the last few years, has made such great and rapid progress, and its province has been so much enlarged by the increasing labours of its devotees, and the important discoveries resulting therefrom, as almost to place it beyond the reach of a large majority of general practitioners; while even the advanced students of the present day find the accumulation of details so profuse, and the results of experiment so contradictory, as well nigh to defy their mastery, or, at least, to render the study, as a whole, irksome and unprofitable. To that portion of the science which relates more directly to the animal organism, its organs and tissues, and their functions, the same remarks are applicable in a limited degree; while here more particularly it is desirable that such discoveries, their deductions and suggestions, should not only not pass unnoticed, but be generally known and thoroughly understood. To concentrate this vast amount of knowledge; to reduce it to more definite and inviting form for practical purposes; and to place it, as such, within the reach of those most deeply interested in its results, has become a great desideratum, if not an actual necessity.

To Dr. Day of St. Andrew's, the profession is indebted for a work which, to us, seems very much calculated to fulfil these ends.

The work is well adapted to meet the exigencies of the hard-wrought medical practitioner in his efforts to keep pace with the progress of his day; and the student of medicine will duly appreciate it, when he finds it simplify the mysteries and intricacies of organic chemistry, and its applications to physiology in the actual practice of his art. It is all the more acceptable, because unprecedented; for while our libraries and consulting-tables contain numerous monographs on the different subjects which constitute these sciences, from German, French, and English authors, a vacancy has existed, which is only now filled up by this systematic and concise collection and translation of the results of such labours. The author has the happy combination of being an accurate observer, a subtle critic, a clear expounder and translator, well-versed in each department of his subject; and, while himself professing nothing original in experiment or discovery, he succeeds in bringing before his readers in limited compass, and as a connected whole, the practical results and most important advances made, in the sciences alluded to, up to the present day. We have thus access to the labours of many eminent writers whose works would otherwise seldom reach us, being scattered through journals in disjointed articles, or existing only as untranslated monographs.

The work is entitled *Physiological Chemistry*; and in it, from a mass of intricate experiment, important discovery, and laboured controversy on each branch of the subject, we have a collection made, bulky it must be in the main, but shorn of all that is redundant or that can be dispensed with without detracting from the value of the subject matter on hand.

The first book, that devoted to the Proximate Principles entering into the Composition of the Solids and Fluids of the Organism, is the only part of the work which, with practical men, is likely to meet with a hasty perusal. The reason of this rests with the subject; not with the manner in which it is treated. Proximate principles, here as elsewhere, are dry and uninteresting; but their study is unavoidable, if we would rightly value their after applications. Dr. Day places them before us in their least uninteresting view. If he must give us elements of hard sounding name, complicated character, and hypothetical, seldom to be remembered formulæ, with their actions and reactions, he takes care without unnecessary delay to furnish us also with their sources and combinations, uses and abuses, in our delicate and complex organism. In this book, we have the non-nitrogenous organic acids, nitrogenous basic bodies, nitrogenous conjugated acids, haloid bases and salts, the carbo-hydrates, protein bodies, etc., separately grouped; each individual member of the respective groups being dealt with, in brief or at length, according to its theoretical and practical value, so as to save us much unprofitable detail, where such serves no practical end, while we lose nothing that is theoretically of importance.

Book second is devoted to the Chemistry of the Animal Juices and Tissues. Here we find not much, perhaps, of what is actually new; but a great deal of what has for some time past been known, but only in an uncertain and unsatisfactory way. What has been refuted and set aside as no longer tenable in theory and experiment, is here held up in its just light; and facts which were received as incontrovertible, or at least uncontroverted, are more diffidently set forth in comparison with opposing results of more recent and equally trustworthy experiment. Each division of this book deserves attention and study; while many valuable deductions suggest themselves regarding dietetics and therapeutics, which amply repay a careful perusal.

The Digestive Fluids are separately analysed; their chemical composition and constituents, their actions and conditions in health and disease (so far as these are yet known), and their influences on food within and external to the body, are duly noted and considered.

The Blood and its Allies; the Fluids connected with Generation and Development; the Secretions of the Mucous Membrane and of the Skin; the Solid Tissues of the Body, etc., all meet with equal justice and proportionate attention.

The chapters on the Gastric Juice, Bile, Blood, and Urine, are specially deserving of careful study. We quote a short extract from the chapter on Urine. In treating of the acid fermentation of the urine, Dr. Day writes:—

"After standing for some days exposed to the air at an ordinary temperature, we find that its reaction becomes more acid, and red or yellow crystals of uric acid, visible to the naked eye, are deposited in the mucous sediment and on the walls of the vessel; and the urine will often remain in this condition for weeks without further decomposition. If the urine is of low specific gravity, or if the temperature is higher than usual, this acid fermentation is rapidly replaced by another decomposition, in which the fluid is first covered with a thin, glistening, and often iridescent pellicle, fragments of which gradually break off and sink to the bottom. The mucous sediment then becomes interspersed with dirty yellowish-white flakes; the urine becomes paler, assumes an alkaline reaction, and begins to develope a fœtid ammoniacal odour. The red or yellow crystals are now replaced by white amorphous granules, and colourless, strongly refracting, prismatic crystals of phosphate of ammonia and magnesia (triple phosphate)."

Then noticing the Formation of Uric Acid Sediments, he adds:—

"Scherer has unquestionably given the true explanation of the mode of formation of uric acid sediments, showing that they are solely dependent on the decomposition of the pigment. In perfectly fresh urine, we scarcely ever see a uric acid sediment; but every urine, as it undergoes acid fermentation, sooner or later deposits crystals of free uric acid. The free acid produced (probably) by the action of the vesical mucous on the pigment, decomposes the comparatively insoluble urates (as mentioned in the last paragraph), and by combining with a portion of the base, liberates uric acid, which at once crystallises. There is reason to believe that oxalate of lime is also formed, or at all events separated during this acid fermentation; for, while crystals of oxalate of lime are very seldom found in a perfectly fresh specimen of urine, they can very often be detected intermingled with uric acid crystals after the fluid has stood for some time. The acid fermentation having at length reached its maximum (the time varying from days to even a few weeks), the free acid gradually disappears, the surface of the fluid becomes covered with thread-like fungi, confervæ, and algæ, the reaction becomes neutral, then alkaline and the crystals of uric acid at length disappear, and are replaced by a mixed sediment of a perfectly different nature. The ammonia produced by the decomposition of the urea throws down the earthy phosphates, the phosphate of lime falling unchanged, and the phosphate of magnesia combining with ammonia to form the beautiful and well known crystals of phosphate of ammonia and magnesia, or the triple phosphate. Another portion of the ammonia at the same time combines with the uric acid (which had formed the previous sediment) and gives rise to the production of urate of ammonia. At this stage, the urine effervesces on the addition of an acid, and has almost entirely lost its original yellow tint, in consequence of the decomposition of most or all of the pigment."

Book third, under the head of the Zoo-Chemical Processes, treats of the Metamorphoses of Tissues, Digestion, Respiration, and Nutrition. It forms a practical *résumé* of all that has preceded it, and is that over which the reader is likely to linger longest. It contains much interesting and instructive information; no curt extracts from it would serve to give any just idea of its value; to be properly appreciated, it must be read carefully in connexion.

As a whole, the work is one well deserving of a prominent place in the medical library and class-room; its masterly style, concise and lucid arrangement, and valuable contents, entitle it to such. In carrying out this work, Dr. Day has had a humble aim, but the result has surpassed the design; and we cannot conceive that any medical practitioner, anxious to perform his work by the best guides of scientific discovery, the sources of which lie out of his reach, can fail to take advantage of a work offering to him so much valuable instruction in a form at once so interesting and easily available.

The Bath Mineral Waters in Cases of Rheumatism, Sciatica, Gout, etc. By R. W. Falconer, M.D., Physician to the Bath General Hospital, etc. Pp. 81. London: 1860.

Buxton Thermal Spring. By J. A. Pearson, F.R.C.S.E., etc. Pp. 35. London: 1861.

Dr. Falconer and Mr. Pearson have given to the profession the benefit of their experience of the curative powers of the Bath and the Buxton waters, by detailing shortly and tersely cases treated by them in hospital. Mr. Pearson gives his hundred cases, and Dr. Falconer his hundred and fifty-six. The details are copied straight from the hospital notebook; so that every one may judge, according to his pleasure, of the amount of *propter hoc* which may be fairly ascribed to the waters as curative agents.

Dr. Falconer thus writes of his healing spring:—

> "That the Bath waters possess healing powers of a very valuable kind, cannot be doubted; but they have of late years not been regarded so highly either by the medical profession or the public as they ought to be. I have endeavoured, by carefully reporting their effects, whether beneficial or otherwise, which have come under my own observation, to supply materials for consideration, and thus enable others who may be believed to be uninfluenced by local or personal prejudice, to judge of the powers of these waters, and to decide what amount of confidence is to be placed in their remedial properties."

Mr. Pearson also records his cases "to show the efficacy of the Buxton water." He maintains that "its curative power is not nitrogen; that it does not hold *in solution* more than the merest trace of the gas." "The Buxton, Bath, and Bristol thermal waters," says Dr. S. Muspratt, "come under the category calcareous."

The hospital to which Mr. Pearson is attached appears, from his account, to be lapsing into the condition of a general hospital; and to this he objects.

The profession is indebted to both of these gentlemen for thus placing before it a veritable account of the effects of these waters, free from all that slip-slop and tinsel which so frequently disfigures or disguises the descriptions of the uses of mineral waters.

Instructions to Mothers and Nurses in the Lying-in Chamber. By J. C. Lory Marsh, M.D., M.R.C.P.Lond. Pp. 22. London: 1861.

The object of this unassuming little pamphlet is mainly to point out to "nurses" the kind of knowledge and the sort of services which are required at their hands when in attendance on lying-in women. There can be no doubt that the *sage femme* of this country is sadly too often an incapable and stupid old crone, stuffed with the errors of her "long experience," and incapable of believing in the possibility of her fallibility. Dr. Marsh much prefers a strong-minded able-bodied young woman to the aforesaid old lady. This is his way of stating the case:—

> "So far as a tolerably extensive field for observation has enabled me to form an opinion, the best nurses I have met with have been active, strong, and obliging young women, with hearts, and hands, and heads, willing to serve their neighbours as themselves; and the worst class have been old worn-out women, whose energies have been sapped by a large family, and whose misfortunes (not their inclination) have led them to adopt a laborious life as a means of subsistence, because they are unable to obtain a living in any other way, and not because they possess one single quality of mind or body to fit them for such an important post."

A nurse, who is not above learning her business, may gain a good many useful hints from these pages.

Progress of Medical Science.

Venous Hæmorrhage. This subject has been very fully discussed by B. Langenbeck, in the first part of the *Archiv für Klinische Chirurgie.* The causes of difficulty or impossibility of arresting venous hæmorrhage are, adhesion of the vein to the neighbouring parts; pressure of the column of blood; and regurgitation of the blood. The first mentioned cause of difficulty is especially observed in trephining and in operations for necrosis; and in operations involving the veins of the neck and upper part of the thorax, as the subclavian, external or internal jugular, and axillary. Death may follow wounds of the external jugular vein, even above the point at which it penetrates the cervical fascia. The division of the axillary vein gives rise to unimportant hæmorrhage in comparison with the external jugular, because it is but loosely connected with the fascia, while the external jugular is stretched by the fibres of the platysma myoides. Hæmorrhage in wounds of the large veins may take place from the peripheric as well as from the central end. From the former, the blood flows in a steady stream; from the latter, the bleeding occurs during expiration, or during crying or coughing. Gaping incised wounds of the common jugular vein are fatal, unless immediate surgical aid be at hand. In penetrating wounds of this vein, the blood poured into the sheath may act as a compressing agent and close the orifice; but, if the blood escape into the cellular tissue, a troublesome sanguineous tumour is the result. Suppuration, secondary hæmorrhage, and pyæmia may also follow punctured wounds of the jugular. Gunshot wounds of the large internal veins, or of the internal jugular, may not give rise to serious bleeding at the time, but are liable to be followed by secondary hæmorrhage and thrombus.

Ligature of the corresponding artery is a sure means of arresting hæmorrhage from a large vein, as the internal or the external jugular, after compression has been tried and has failed. Hæmorrhage from wounds of the external iliac and femoral veins is more troublesome than might be expected from their small size and their distance from the heart. In wounds of the internal jugular, the pressure of the column of blood may be diverted to the vein of the opposite side by compression, in consequence of the free communication through the cranial sinuses; while, in the veins of the lower limb, this cannot be done. The iliac and pleural veins bleed usually from the peripheric end; hence J. Roux has advised ligature of the femoral vein in disarticulation of the thigh. Langenbeck, however, has in six cases observed no hæmorrhage from the femoral vein in this operation, although he did not tie the vessel—a proceeding which he considers dangerous.

Dangerous, and even unmanageable venous hæmorrhage may be produced by compression of a venous trunk above a wound, by the pressure of a tumour, by obliteration of a vein, or by interference with the pulmonary circulation. In the leg, for instance, venous hæmorrhage is not unfrequently produced by the bursting of varicose veins. Hæmorrhage from wounded veins, the trunks of which are compressed by tumours, demand ligature of the corresponding artery. Very obstinate also are the capillary venous hæmorrhages, dependent on rupture of the small vessels and compression of the venous trunks. Spontaneous hæmorrhage from tumours is generally venous or capillary, when it arises from pressure of the veins returning the blood. It occurs most readily in very vascular growths, permeated by enlarged sinuous veins, or constricted at the base by the neighbouring parts. Hæmorrhage may occur from internal piles, when they are extruded in defecation and compressed by the sphincter ani; or from polypi of the fauces or of the uterus, when the blood-vessels in them have a cavernous structure. Cirrhosis of the liver sometimes, but very rarely, produces vesical hæmaturia through obstruction of the inferior cava; generally, however, the gradual development of the cirrhosis allows the establishment of a compensatory circulation through the anastomosing veins.

The fact that the venous hæmorrhage in great operations varies with the respiratory act, has led Langenbeck to desire the patient in such cases to breathe deeply; that is, of course, unless he be under the influence of an anæsthetic. But in wounds of the large veins of the neck, deep inspiration must be avoided, on account of the danger of the entrance of air into the veins. In tracheotomy, the hæmorrhage from the thyroid veins is arrested by the inspiration, which takes place as soon as the air-passages are opened. Styptics are regarded by Langenbeck as of very little use in obstinate venous hæmorrhage; while, in ordinary cases, the bleeding ceases spontaneously. Obstinate bleeding from the smaller veins is best arrested by the actual cautery. In hæmorrhage from the larger veins, compression with the finger must be first tried; a slight amount of pressure may be sufficient. When a vein of one of the limbs is cut across, compression of the distal end is generally sufficient; but, if this fail, the proximal end must also be compressed. In wounds of the external or of the common jugular, the compression must be first applied to the central or proximal end, on account of the danger of entrance of air. In hæmorrhage from the larger veins, digital compression is only a temporary means, and must be replaced by a bandage. The object of the bandage is to close the wound without impeding the circulation; and for this purpose Langenbeck prefers strips of sticking plaster, where the edges of the wound can be brought together. When the vein lies deep, and the edges of the integument will not come together, he advises that a piece of lint smeared with cerate be laid on the vessel, and that compression be made by filling the wound with charpie. If a ligature must be applied, it is generally sufficient to tie the distal end; but the proximal end must also be tied, if large branches open into it. In the removal of tumours, when it is an object to avoid loss of blood, the vein may be ligatured in two places previous to the operation, and cut through; the ligatures are removed after the operation. Ligature of veins is, however, to be avoided as much as possible, especially in large hospitals, on account of its liability to be followed by thrombus and pyæmia. The vein may again become pervious, by the removal of the thrombus formed in it when ligatured.

On ligature of the arteries in venous hæmorrhage, Langenbeck remarks that the dread of inducing gangrene has probably restrained surgeons from having recourse to this proceeding. But, while ligature of a large artery may be followed by capillary anæmia and functional disturbance of the part supplied, which may be gradually removed as the circulation becomes re-established; ligature of a vein is likely to produce venous capillary hyperæmia and serous exudation, and even inflammation of the vessel. Ligature of both the artery and the vein, however, appears less likely to produce mischief than when only one vessel is tied; at least, Langenbeck has in two cases tied both the carotid artery and the common jugular vein, and in neither were there any symptoms of importance referrible to disturbance of the cerebral circulation. He refers also to a case in which hæmorrhage of the femoral vein was arrested by ligature of the corresponding artery; and to an instance of popliteal aneurism mentioned by Crisp, in which hæmorrhage from the wounded popliteal vein ceased when the artery was tied. He is evidently reluctant to tie a vein when such a proceeding can possibly be avoided. (*Schmidt's Jahrbücher*, Band 109.)

Double Urinary Fistula in a Female successfully treated. A woman, aged 34, came into the Necker Hospital on July 2nd, 1860. Four years and a half previously she had been delivered by forceps, and soon afterwards found that urine escaped *per vaginam.* She did not trouble herself much about this, but the next year was again confined, and was afterwards operated on without success for the incontinence of urine. Three weeks before her admission into hospital, she was again delivered of a child, which survived eight days only. On examination there was found to be an urethral fistula of about half-an-inch in length, at the union of the lower third with the two upper thirds of the vagina. Operation was deferred for a time, in order that the patient's general health might be attended to. On July 25th, M. Foucher proceeded to operate; and, on making a closer examination than before, he found another fistula, about four-fifths of an inch long, immediately in front of the anterior lip of the cervix uteri. The fistulæ were operated on by Bozeman's method; and on August 14th, the posterior fistula was found completely healed, while an opening of less than two-fifths of an inch still existed in the site of the anterior fistula. On September 8th, another operation was performed with success; and on February 15th of this year, M. Foucher heard from the patient that she continued to possess the power of retaining urine (*L'Union Méd.*, Avril 11, 1861).

Simple Treatment of Lacerated Perinæum. M. Hervieux says, that he has in several cases successfully treated laceration of the perinæum in females by the retention, in contact with the part, of a sponge dipped in a solution of chloride of zinc, in the proportion of one part to from ten to fifteen parts of water. The sponge is renewed four or five times a-day, and is held in its place by a piece of waxed cloth and a few turns of a bandage. The sponge, M. Hervieux says, imbibes the secretions, while the chlorine exerts on them a neutralising and solvent action. Reparation is thus enabled to take place gradually; and the ultimate result is complete cicatrisation. Two cases are recorded in illustration (*L'Union Méd.*, 9 Mai).

A New Parasiticide. At a meeting of the Imperial Medical Society of Lyons, on March 4th, M. Rey stated that he had destroyed cutaneous insects in several cases by the application of benzine. He suggested that it might be employed with advantage in scabies, and also as a vermifuge. The disagreeable taste of the benzine was an objection to its internal use, but it might be given in capsules. In horses and dogs, the administration of benzine had proved successful in the cure of ascarides and tænia (*Gaz. Méd. de Lyon*, Mai 16).

Chloroform Syrup. M. A. Vée recommends the following as a good formula for the internal administration of chloroform. Dissolve ten parts of chloroform in sixty parts of oil of sweet almonds, and add forty parts of gum arabic; make an emulsion with 350 parts of water, and dissolve therein 540 parts of sugar, keeping the mixture cool, in a closed vessel. One hundred parts by weight of this mixture contain exactly one part of chloroform (*L'Union Méd.*, Avril 23).

British Medical Journal.

SATURDAY, JUNE 15th, 1861.

ASPHYXIA: ITS NATURE AND TREATMENT.

There are few subjects on which it is more important that clear and definite views should be entertained, than that to which we propose to direct a few remarks to-day. We, as members of the medical body, may at any time be called upon, either in a collective capacity or individually, to express an opinion as to the best means of restoring suspended animation, or suddenly to use our efforts in the saving of those who have been either suffocated or drowned. It is imperative on us to make ourselves acquainted with all that the advanced physiology of our day has brought to light with reference to the nature of asphyxia, and the mode by which its phenomena may be most successfully combated. Not only this, however; but, as guardians of the public health, it is our duty to make known as extensively as we can the important practical conclusions which scientific investigation has taught us.

The history of the various discoveries which have brought our knowledge of asphyxia to its present position is replete with interest and instruction, and tends to show by what tardy steps the great problems of life and death must ever be worked out. The subject has always been one, more especially since the aerial changes which take place in the lungs have been known, which has occupied the attention of the most eminent physiologists. Much speculation has taken place with regard to the proximate cause of death in the affection; but each successive theory has but shown the fallacy of previous ones, and has itself fallen before increased knowledge and further investigation. In the search for the more hidden—for that which has baffled, and, it may be, ever will baffle, the keenest inquiry—too little attention has perhaps been paid, until of late years, to more important practical points which lie nearer the surface, a correct knowledge of which must tend to dispel old errors with reference to the treatment of the affection, and to place that treatment on a sounder and more scientific basis.

We cannot dwell on the various theories which have been advanced, of the proximate cause of death in asphyxia. We will simply remark, however, with regard to the view which has been of late years much supported—viz., that the circulation ceases in consequence of the arrest of the blood in the pulmonary capillaries—that we believe the most recent investigations tend to show that there is no absolute stoppage of the blood in the blood-vessels of the lungs; and that the impediment which exists in these vessels must be considered as but a link in the chain of events, rather than as the sole cause, which leads to the cessation of the vital pheuomena. Instead, however, of dwelling on this much vexed question, we prefer to pass on to points which are better understood, and which have a more practical bearing.

Putting aside exceptional cases, it may be laid down as a general rule that, with regard to man and warm-blooded animals, after asphyxia has lasted from two and a half to three minutes, whether produced by drowning or any other cause, every external symptom of life has disappeared, and perfect quietude of the body exists. Has life become extinct? Have the last glimmers of the vital spark left the body? No. The heart is still in action. And here comes a most important and practical question: How long does this action, as a rule, last? Upon the answer to this hinges a point to which we shall hereafter refer. The general impression which has prevailed amongst physiologists is, "that the heart ceases to beat in asphyxia in a few minutes after the cessation of the functions of animal life". Many observers have found the heart beating in the lower mammalia when opened several minutes after asphyxia had commenced; but we believe the most important series of investigations on this point are those of Mr. Erichsen and Dr. Waters. The former found that, in dogs, the average period during which the ventricles contracted was nine minutes and a half; whilst the latter, whose experiments are more numerous, and were performed on dogs, rabbits, and cats, found that, in cases of submersion, the ventricles continued in action for a longer period—in some instances, even up to the twentieth, thirtieth, and forty-fifth minute. We might quote instances where prolonged duration of the heart's action in asphyxia has been observed in man; and we see no reason to reject the application of the principle to him, any more than to the lower mammalia. A knowledge of these facts is exceedingly important; for, so long as there is even a feeble action of the ventricles going on, there is hope that life may be restored if artificial respiration can be properly carried out. Several years ago, Mr. Erichsen showed that he could restore the circulation by inflating the lungs, provided some ventricular action existed; and he also showed that such a result could not be brought about if all contraction had ceased. Long before Erichsen's experiments, however, Dr. Roesler of Tubingen had succeeded by artificial respiration in reanimating animals which had been asphyxiated for eleven and three-quarters, thirteen and a half, and seventeen and three-quarters minutes.

Roesler's experiments were thought to prove that it was possible to re-excite the action of the heart after it had once ceased. No proof whatever exists that this is possible, and no such explanation is necessary to account for Roesler's success. The observations we have alluded to prove the prolonged duration of the heart's beat, and explain the beneficial influence of artificial respiration.

The view, therefore, of some physiologists, that after five minutes of asphyxia the circulation is so reduced that all efforts to restore life are hopeless, is not in accordance with more advanced physiological investigation, nor yet with what has occurred in man in cases where restoration has taken place after a submersion of several minutes. A recognition of these facts is calculated to have a beneficial influence on our practice as regards the treatment of the drowned, and may tend to make us persevere in efforts to restore animation in cases which, if we acted on the supposition that the heart soon ceases to beat, we should consider altogether hopeless.

Now, what is the position we are in as regards the treatment of asphyxia? Can anything be more unsatisfactory? One Society recommends the use of the hot bath, another forbids it. The Royal Humane Society of London for many years has used the hot bath; and in the rules for restoring the drowned, printed in their Report for 1860, no directions whatever are given for producing artificial respiration. The application of the bath is still persisted in, but in a modified manner. The most recent rules of the Society direct the bath to be used for *twenty seconds only*, as an excitant of respiration. Now, what are the facts with regard to the hot bath? Is its prolonged or temporary use founded on sound physiological principles? The observations of Edwards, Legallois, Brown-Séquard, Marshall Hall, and others, have tended to show that animals in a state of asphyxia will live longest in a moderate temperature; and that, by increasing the heat, without at the same time promoting respiration, prejudicial results are brought about; but, until the recent researches of Dr. Waters, the exact pathological effects the bath produces were unknown. For further information, we must refer our readers to the abstract of that gentleman's paper which we published a fortnight ago, and from which we have quoted in this article.

Now, without going into any details, the principle that seems to be established by these experiments is this: that, in cases of asphyxia, whether partial or complete, the hot bath has the effect of producing great congestion of the lungs, and an accumulation of blood on both sides of the heart. In cases of partial asphyxia, a high rate of mortality follows the use of the bath some hours after its application. Are these results in accordance with other known physiological facts? In asphyxia, the great object must be to excite respiration. Does heat applied to the body so act? All that we are acquainted with tends to show that heat is rather a depressant than an excitant of respiratory movements? We all know the effect of a draught of cold air on the surface of a still-born child—of the influence of cold water and cold air in cases of syncope. Who would substitute in these instances heat for cold? The practice of alternately dipping an asphyxiated infant into hot and cold water is a very valuable one; but, we ask, is it the heat, or the shock of the cold, which produces the inspiratory act? This practice, valuable as it may be in the infant, is not so easily carried out in the adult, and moreover cannot, except in rare cases, be put in practice on the spot where the asphyxia has occurred. As tending to show that the effects of the hot bath in man are of the same kind as those produced in the lower animals, we may refer to the series of experiments, recently published in the *Lancet*, performed by Mr. Hunter.

Moderate temperature and free exposure of the surface of the body seem to be most favourable to recovery in asphyxia; but the great remedy—the *sine quâ non* in complete asphyxia—is artificial respiration. We shall not stop now to discuss the merits of the various rival systems which have been proposed to carry out this object; but, setting aside the question of inflation of the lungs by means of instruments, we believe no method will ever be successful which does not admit of such a position of the body as will not only prevent the tongue falling backwards, but will allow of the escape of fluids which may accumulate in the mouth. To be of any use, artificial respiration must be systematically and perseveringly carried out; nor must it be desisted from until after a lengthened trial. We believe that many lives have been lost by not fully carrying out this principle, and by alternating efforts to produce respiration with the use of the hot bath. What little good may have been effected by the one means has been neutralised by the other, and hence no favourable result has followed.

The possibility of restoring life after many minutes' submersion in the water has been considered by some high authorities as the conception of a fervid imagination; and it has been supposed that, in the history of such recoveries, great exaggeration has been made with reference to the period asphyxia has lasted. A careful perusal of some of the cases which have been restored by the "ready method" will, we think, convince all candid inquirers both of the prolonged duration of the asphyxia in these instances, and of the value of the mode of treatment adopted.

It is high time that the question of the treatment of asphyxia should be settled, and that Humane Societies should adopt the practice which scientific investigation has shown to be most favourable to recovery. We believe that the days of the hot bath are numbered. Already we see that an alteration has taken place in the practice of the Royal Humane Society; from the prolonged use of the bath, they now recommend its temporary application; and we hope ere long to see it expunged from the directions which they issue. The motto of the Society is, "*Lateat scintillula forsan.*" This little spark is the flickering action of the heart; let them give up the practice of a method which has a tendency to extinguish it.

THE WEEK.

As citizens, living in a land of freedom, we cannot but deeply sympathise with the irreparable loss which Italy has sustained, at this critical stage of her regeneration, through the death of Count Cavour. To us, however, as members of the healing art, his death brings with it something of an intensely tragic character. Every one of us must have felt, as day by day the telegrams brought those fatal words, "delirium," "bleed, "bleed," "bleed," that the life of Italy's first citizen was being sacrificed to satisfy the false medical theories of the Italian physician. This bleeding treatment of the Italian, regarded from our modern point of view, is, in fact, when reduced to its simple terms, nothing more nor less than art assisting disease in the destruction of life. Cavour's worst enemies could have wished him no worse fortune than, in such an illness, to fall into the hands of such practitioners of medicine. Of the actual nature of the disease which attacked Cavour we are not informed; but enough is known to us of its character and of Cavour's antecedents to satisfy every reasonable practitioner in this country that all hope, we would even say all possibility, of recovery, was destroyed by the treatment to which he was subjected. We know that for many years past this man's mind has been upon the rack—his life one long deep mental struggle; we are also told that he was a free liver—two facts enough to satisfy one's common sense that fever, that depressing disease—and what disease is not depressing, as regards the human system at large?—would find in him a subject especially prone to its exhausting influences. We may be very sure that, together with these fatal pourings out of the vital fluid, food and wine were, at the same time, carefully withheld from him, in accordance with that wretched theory which makes food fuel to the fire raging within; that the *diète absolue* of rigid Broussaism was strictly enforced. Alas! for such medical science! Every one of us must admit that had this great man fallen into the hands of a clear headed English nurse well skilled in fever-treatment, instead of into the hands of Italian medical science, he might still have been alive. Sincerely do we hope that this sacrifice may, at least, bear its fruits of good to Italian medicine, and be the cause of raising up serious question and opposition to its routine, antiquated, mediæval method of curing disease, by bleeding to death the body which it has invaded. There is too much reason to fear that the lives of more than one of the reigning royal family of Sardinia have been sacrificed to the medical Moloch, starvation and bleeding. The patient is bled till he becomes delirious, and then bled again because he is delirious, and, when thus reduced to the trembling state in which even Italian Rasoris no longer dare to ply their lancet, he is put into a warm bath!—the last and gentlest method of extinguishing the lingering glimmer of life! Such has been the medical treatment of Count Cavour. We may be prepared to hear the babbling tongues of varied quackeries assail our art for this. And this is the answer which we give them.*

In another page of our Journal will be found a paragraph stating that the Committee engaged in carrying out a memorial to the late Sir James McGrigor have obtained from the Commissioners of Public Works an eligible site for the erection of a statue of that gentlemen. An appeal is, therefore, renewed to the profession and to the public for assistance in carrying out the designs of the Committee. The services performed by this public servant—so faithfully and zealously performed by him—undoubtedly claim for him their public and honourable recognition; and we sincerely hope, therefore, that some fitting and appropriate statue—not an absurd travestie of art such as usually meets the eye in the streets of our metropolis—may be raised to his memory. We cannot help remarking that, in the list of subscribers which have been forwarded to us, the non-professional public seems scarcely to be represented. There is surely something wrong here. A public servant worthy of public honours, and of the erection of a statue in a public place, ought surely to have those honours paid to him by his countrymen at large, and not by that section of them merely to which he professionally belonged. We trust that the Committee will turn their attention to this; and if they have a public statue at all will take care that it is truly a national mark of esteem, and not a mere tribute of respect at the hands of Sir J. McGrigor's professional friends and admirers.

The following are the remarks of the Turin correspondent of the *Times* on the death of Count Cavour:—

> "The Romans, it is said, crowned on the Capitol the physician who rid them of Pope Adrian VI. The Italians of our own days would honestly hang Count Cavour's doctors if the execution would afford any relief to their feelings. There never was a clearer case of a man murdered by his medical attendants. Within a very short period of five days they attempted to cure the Count of

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* The interest felt in the fate of this distinguished statesman by our professional brethren, is proved by the numerous letters which we have received referring to it.

four or more different complaints—congestion of the brain, typhus fever, intermittent pernicious fever, brain fever, dropsy, and lastly gout; and for all these diseases they could think of nothing but their own sovereign remedy, the lancet. I think these excellent practitioners are worthy to send down their names to posterity. They were Dr. Rossi, Dr. Mattoni, and, towards the end, the King's physician, Riberi, the same in whose hands, the mother, wife, and brother of Victor Emmanuel expired, one by one, in the early months of the fatal year 1855. Dr. Tommasi, who was summoned from Pavia by Cavour's friends, was not admitted to consultation."

The London College of Physicians progresses in its career of liberality and expansion. Every week its doors open wider. We are now glad to inform our readers that a motion, under the notice of the College, and which will, no doubt, soon become law, gives to the College the power of admitting Licentiates, under certain conditions, without examination. These are the proposed new laws on this point:—

"Any candidate who has already obtained the degree of Doctor or Bachelor in Medicine at an University, after a course of study and an examination satisfactory to the examiners appointed by the College, shall be exempt from all parts of the examinations hereinbefore described, except such as relate to the principles and practice of medicine and midwifery. And it shall be lawful for the examiners to recommend to the College that any candidate for the licence shall, for reasons to be fully stated in such case to the College, be exempted from any of the regulations hereinbefore prescribed for admission into the order of Licentiates."

At a late meeting of the College of Physicians of London, it came out, to the surprise of every one, that neither Greek nor Latin is required from candidates for the Oxford and Cambridge Middle Class Examinations. The fact will, we fancy, equally astonish our readers. The College has unwittingly accepted these examinations as an equivalent for its preliminary examination; and it did so at the recommendation of the Medical Council. It will now, however, have to redress such a manifest error; for it of course will not allow such a degeneration in its requirements to occur as is implied in a possibly complete ignorance of Latin and Greek on the part of candidates for the honours of its license.

The London College of Physicians has not yet arrived at that stage of luxurious satiety of wealth which will enable it to present to its President a portrait of himself by a first-rate Scotch artist; but it has resolved that it is now in a position which will enable it to offer to its chief functionaries honoraria somewhat equivalent to the amount of services rendered by them. The following are the fees which it is proposed shall in future attach to the various offices of the College:—President, £200; the four Censors, £50 each; the Treasurer, £100; the Registrar, £150, with fees for licenses granted; the Librarian, £50; the Bedellus, £200,—making together the sum of £900. This is an advance of upwards of £300 on the former fees of officers. Of course, in addition to this sum, there are the fees of the Examiners.

We are most pleased to hear that Dr. Copland has informed the College of Physicians that it is his intention to ask the College to express its opinion on the subject of professional intercourse with homœopaths. It is satisfactory to find that the matter is at last beginning to attract the attention of our medical corporations.

We recommend the following memorial to the serious consideration of our Royal College of Surgeons. It forms part of the Annual Report of the Royal College of Surgeons of Ireland; and is, as may be seen from the following, still under the consideration of the Council of that body. Would not both Colleges do well to join together and give an united answer to the important questions contained in the memorial?

Memorial respecting Professional Ethics.

The subject of the following memorial, presented on April 5th, 1861, is still under the serious consideration of the Council of the College of Surgeons of Ireland.

"We, the undersigned Fellows of the Royal College of Surgeons, being strongly of opinion that some provision should be made in the rules or bye-laws of the College, for the purpose of preserving amongst its members a high professional standard, beg to bring the subject under the notice of the Council, and request that they will take such steps as they deem necessary for the purpose of providing their members with fixed laws for their guidance and direction, and also for punishing, by means of censure or otherwise, any of their body who are themselves found to act in a glaringly unprofessional manner, or who offend by meeting in consultation persons who practise homœopathy or other forms of quackery, or practitioners who seek for business through the medium of public advertisements. And we further request that the Council will confer with the College of Physicians, with the view of coming to an understanding that the members of each College shall, in future, mutually respect and give force to the act of the other, if at any time the unfortunate necessity should arise of visiting a member with censure.—John Hamilton, Frederick Kirkpatrick, Gerald Osbrey, Francis L'Estrange, Alfred H. McClintock, B. Wills Richardson, John K. Barton, John Morgan, Robert McDonnell, W. R. Wilde, Albert J. Walsh, Robert D. Speedy, J. Rutherford Kirkpatrick, B. G. Darley, H. Minchin, Daniel F. Brady, Richard Tuohill, Chas. Johnson, Edward Ledwich, S. L. Hardy, Jerome Morgan, Robert Persse White, William A. Elliott, Thomas Darby, Samuel Gordon, W. Faussett, Alex. Macdonnell."

We some weeks ago recorded the fact that an acrobat at the Alhambra had broken his back, or something like it, in attempting to perform a grand *tour de force*, professionally called the "trapèze." Some of the daily journals became, at the time, temporarily indignant at the exhibition—that the owners of such establishments should permit perilous experiments of that nature to be performed for the satisfaction of inhuman, morbid appetites. It is curious, referring back to this incident, to note under this head a revolution in journal sentiments. The widely famed acrobat who is now pandering, under the auspices of the managers of the Crystal Palace amusements, to the self-same morbid appetite, so far from meeting with discoûragement from the daily press, actually receives its approbation. It is, perhaps, somewhat beyond our limits to meddle with these matters; but we cannot refrain from expressing a hope that our profession will do its best to repudiate any patronage of the proceeding. Stripped of all gauze and glitter, it will, we believe, be found that the gratification which M. Blondin's performances excite in men and women's minds is one of a very brutalising character—much the same sensation, in fact, as is derived from the seeing a man hanged, or his head chopped off. Clearly, the whole excitement of the thing consists in this: that M. Blondin may, by some turn of luck, at any moment, have his brains smashed out, or his body pounded to a jelly. If, on his two-inch rope, stretched about six inches from *terra firma*, he were to go through the same tricks as those he now performs in his exalted sphere of action, he would practise to empty benches. Such scenes can, in our opinion, have no other than a brutalising influence over the mind. They remind one of the gladiatorial slaughterings which characterised the amusements of extreme Roman luxury and Roman civilisation — scenes which, as our preachers so often tell us, distinctly marked Roman civilisation from the modern Christian civilisation! Since writing the above, we have met with the following lines on M. Blondin's performances in the *Daily Telegraph*, and we copy them with pleasure:—

> "The only feeling his performances can possibly excite among those who witness them is one of pain and apprehension, while, among those who stay away, the inevitable reflection is one of surprise that even the ordinary populace should be interested in a demonstration so utterly unmeaning, repulsive, and grotesque."

On Wednesday last, Drs. Alderson, Chambers, and Sibson, and Messrs. Coulson, Lane, and Ure, were unanimously reelected medical officers of St. Mary's Hospital. This reelection took place in accordance with the terms of the law which required their reelection after ten years tenure of office.

We regret to have to announce the death of Mr. Benjamin Phillips, formerly surgeon to the Westminster Hospital. Mr. Phillips's health compelled him some years ago to retire from the active duties of his profession. He had, however, only been seriously ill during the last few days of his life. Mr. Phillips was distinguished as a very hard-working member of the profession, and was much respected by all who knew him.

We ventured to prophesy that the step taken by the governors of St. Mary's Hospital, in reference to the terms of tenure of office by their medical officers, would form an example which would soon find imitators throughout the country. We rejoice to find that St. George's Hospital is now about to take this subject into its consideration. The weekly board of that hospital have, as we are informed, taken the opportunity of the resignation of two of their surgeons, Messrs. Hawkins and Cutler, to summon a special court to consider whether it is not advisable to alter the law, which at present prevents the holding of office by physician or surgeon after the age of 65. The alteration proposed is, that no one shall hold the office of full physician or surgeon for a longer period than twenty years without any limit as to age, and that, at the termination of their twenty years of office, the physicians and surgeons shall become consulting-officers.

The candidates for the vacant offices of surgeon to St. George's Hospital are, as we stated last week, Mr. Prescott Hewett and Mr. Pollock, who, for so long a time, have been assistant-surgeons to the hospital. To succeed Mr. Hewett and Mr. Pollock, the following gentlemen have offered themselves for the offices of assistant-surgeons, namely: Mr. Athol Johnson, the lecturer on physiology in the Hospital School, and surgeon to the Hospital for Sick Children; Mr. Henry Gray, who obtained the Astley Cooper prize, as well as the prize of the College of Surgeons, and is the author of some papers in *Medico-Chirurgical Transactions*, author of a well known *System of Anatomy*, and the lecturer on anatomy in the Hospital School; and, lastly, Mr. Timothy Holmes, M.A. of the University of Cambridge, and curator of the Hospital Museum. Mr. Holmes is editor of the *System of Surgery* now in course of publication. Candidates for the offices of assistant-surgeons must be Fellows of the College of Surgeons of England. The election will take place on Friday next, the 21st inst.

We are deeply sorry to learn, since writing the above lines, that Mr. Gray, who has been suffering under an attack of confluent small-pox, died on Thursday morning last. It is not for us to reason upon this sad event; but it is impossible not to feel, at such a moment, of how little account are all our great endeavours for professional advancement. It may well teach us all to pause for an instant amidst the busy struggle of life! On the very threshold of his long cherished wishes, just as he was about to realise the object of his ambition and reap the well earned fruit of his labours, death marks our brother for his own.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

Philip H. Williams, M.D., *General Secretary.*

Worcester, March 27th, 1861.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
North Wales. [Annual.]	Wynnstay Arms Hotel, Wrexham.	Tuesday, June 18th, 11.30 A.M.
Birmingham and Midland Counties. [Annual.]	Hen and Chickens Hotel, Birmingham.	Friday, June 21st, 3.30 P.M.
South Midland. [Annual.]	General Infirmary, Northampton.	Thursday, June 27th, 12.30 P.M.
East Anglian. [Annual.]	Norfolk and Norwich Hospital.	Friday, June 28th, 2 P.M.
Metropol. Counties. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 2nd, 3 P.M.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

The Twenty-fifth Annual Meeting of this Branch was held in the Medical Institution, Mount Pleasant, Liverpool, on Wednesday, June 6th: Edward Batty, Esq., President, in the chair. There were present, sixty members, and five visitors.

Dr. Wilkinson, the retiring president, took the chair, and said he begged to return his sincere thanks to the Association for the honour they had done him by electing him to the office of president during the past year. He also thanked Dr. Waters for the attention he had shown and the relief he had afforded him in the discharge of his duties in the chair.

Dr. Wilkinson then vacated the chair, and the president for the current year, E. Batty, Esq. took his place.

President's Address. The new president delivered an address in which he expressed his thanks for the honour conferred on him, his gratification at the numerously attended meeting, and his congratulation on the maintenance of its position by the Association, and on the character of the Journal; in which, he held, simplicity of language would increase the value of the records given to the practitioners in the mining and manufacturing districts. He then proceeded to allude to medical missions, and on the influence of medicine on uncivilised, or comparatively uncivilised, nations. "Our attention," he said, "has recently been drawn to the extraordinary operations in China, whence each successive mail brings proof of the soundness of our policy in diplomatic energy as well as in military tactics. The Tartar government has so entirely removed its old policy of ignoring the existence of foreigners within the empire, that *it*, and not the English, are most anxious to come into closer contact with us. The feelings of prejudice and dislike on the part of the Chinese rulers have been greatly overcome by the residence of our medical brethren amongst them, and we have the best grounds for believing that a free access and intercourse with the people is now available to an extent hitherto unknown. Again, look at the vast region of Africa, where our wonderfully successful medical missionary, Dr. Livingstone, is the first European that has ever made his way across that vast continent; where, as he states, he never would have accomplished his adventurous journey had it not been for his knowledge of the healing art. This is, indeed, a high testimony to the benevolent and all-powerful character of our profession, for the various tribes were deaf to the voice of the missionary, but were capable of appreciating the good services of the medical man. No one can have perused the narrative of this remarkable man's travels without being impressed with his noble character, making the British name and character known to millions, scattering the seeds of a future commercial, moral, and religious harvest. . . . . The late Professor Alison writes thus: 'It is not assigning too much importance to medical science, or to the medical art to assert that, of the temporal benefits which must thus precede and attend the extension of Christianity over the world, their influence on social happiness must be one of the surest and most powerful.' . . . . Sir H. Halford relates a most striking anecdote in evidence of this important subject: 'It seems that in the year 1636, one of the princesses of the Imperial family of the Great Mogul, on the coast of Coromandel, had been dreadfully burnt, and a messenger was sent to Surat to desire the assistance of one of the English surgeons there, when Mr. Gabriel Boughton proceeded forthwith to Delhi, and performed the cure. On the minister of the Great Mogul asking him what his master could do to manifest his gratitude for so important a service, Boughton answered with a disinterestedness, a generosity, and a patriotism beyond all praise, 'Let my nation trade with yours.' 'Be it so,' was the reply. Here did the civilisation of that vast continent commence.'" He (the President) thought that the present opportunity was favourable to bring forward this important subject, especially as he was surrounded by those who are engaged in hospitals and schools of medicine, having frequent intercourse with students entering upon their medical career, and to whom profitable suggestions may be made and encouragements offered to their wishes by this high and ennobling work.

Report of Council. Dr. Waters, the honorary secretary, read the following report:—

"The Council, in presenting their annual report, desire to express the satisfaction they feel in again meeting the members of the Association in Liverpool.

"The past year has not been characterised by any important movement in connexion with the profession; and there has been no subject which has specially attracted the attention of your Council. The same remark will almost apply to the Association at large; for with the single exception of the change which has been made in the editorship of the Journal, no special subject has been under consideration.

"Your Council deem it their duty to express their satisfaction at the improvement which has taken place in the general tone and character of the Journal during the present year; they trust that this improvement will be steadily maintained, and that it will tend to raise the scientific position of the Association, and to increase the number of its members.

"To this latter point your Council would desire to direct the special attention of the members of the branch. Large as is this branch of the Association, the largest in fact, in the kingdom, your Council nevertheless feel that it is capable of much greater extension, and that the number of its members ought to be greatly increased. There are many towns of considerable importance in the district which the branch includes where but very few members are to be found. This is much to be regretted; and your Council would strongly urge on all the present members of the society the importance of endeavouring to secure recruits in the various neighbourhoods in which they reside.

"There is another subject to which the Council would desire to refer, viz., the desirability of holding meetings of the branch in parts of Lancashire and Cheshire, which have not as yet been the scenes of annual gatherings. It rests, however, with the different localities to invite the members to hold such meetings; and considering the large size and increasing importance of some of the towns of the two counties, it has been a matter of regret to your Council that no invitations have been received from them.

"Your Council have pleasure in congratulating the members on the continued prosperity of the branch; they think that at the present time the Association at large occupies a higher position in the profession than at any previous epoch, and they believe that a considerable accession has been made to its ranks during the present year. They trust that this movement will continue, and that by the individual exertions and scientific labours of its members the influence of the Association may be more widely spread, and the objects for which it was founded more extensively promoted.

"Your Council have the satisfaction to state that the treasurer's account shows a balance in favour of the Branch of £16 : 19 : 10."

Dr. Turnbull moved, Mr. Steele seconded, and it was resolved,

"That the Report of the Council now read be adopted and printed, together with the proceedings of this meeting."

Votes of Thanks to the Retiring Officers. It was moved by Mr. Gibson, seconded by Mr. Swift, and carried,

"That the best thanks of this meeting be given to M. A. E. Wilkinson, M.D., the late President, to E. Batty, Esq., and G. Southam, Esq., the late Vice-Presidents: to the Honorary Secretary; and to the other members of the Council, for their services during the past year."

Dr. Roberts moved, Mr. Halkyard seconded, and it was resolved,

"That the best thanks of this meeting be given to the Local Secretaries, J. M. Robinson, Esq., Bolton, J. Sharp, Esq., Warrington, and J. Thorburn, M.D., Manchester, for their valuable services during the past year, and that they be severally reappointed, with the addition of J. P. Scowcroft, Esq., Southport."

Annual Meeting in 1862. It was moved by Mr. Wilson, seconded by Mr. Lund, and resolved,

"That the next Annual Meeting be held in Manchester; that G. Southam, Esq., be appointed President-elect; and T. Davies, M.D., Chester, and W. T. Callon, L.R.C.P., Liverpool, be appointed Vice-Presidents-elect."

Branch Council. It was moved by Dr. Hatton, seconded by Dr. Mitchell, and resolved,

"That, in addition to the President (E. Batty, Esq.), the Vice-Presidents (L. E. Desmond, Esq., and H. Wilson, Esq.), and the Honorary Secretary (A. T. H. Waters, M.R.C.P.L.), the following gentlemen constitute the Council for the ensuing year:—W. T. Callon, L.R.C.P.E., Liverpool; J. Dickinson, M.D., Liverpool; W. H. Duncan, M.D., Liverpool; R. Flint, Esq., Stockport; H. Halkyard, Esq., Oldham; Ellis Jones, Esq., Liverpool; E. Lund, Esq., Manchester; P. Macintyre, M.D., Liverpool; G. Mallett, Esq., Bolton; R. Martland, M.B., Blackburn; T. Mellor, Esq. Manchester; D. Noble, M.A., M.D., Manchester; A. Ransome, M.A., M.B., Manchester; W. Roberts, M.D., Manchester; G. Southam, Esq., Manchester; J. Sharp, Esq. Warrington; L. Spencer, M.D., Preston; G. Turner, M.D., Stockport; J. Vose, M.D., Liverpool; M. A. E. Wilkinson, M.D., Manchester.

Representatives in the General Council. It was moved by Mr. Hakes, seconded by Mr. McCheane, and resolved,

"That the following gentlemen be appointed Representatives of the Branch in the General Council:—E. Batty, Esq., Liverpool; J. Dickinson, M.D., Liverpool; J. Hatton, M.D., Manchester; Ellis Jones, Esq., Liverpool; G. Southam, Esq., Manchester; L. Spencer, Esq., Preston; J. Vose, M.D., Liverpool; A. Stookes, M.D., Liverpool; A. T. H. Waters, M.R.C.P. (Secretary); E. Waters, M.D., Chester; G. Wolstenholme, Esq., Bolton; M. A. E. Wilkinson, M.D., Manchester.

Mode of Election of Council. It was moved by Mr. Steele, seconded by Dr. Burrowes, and carried,

"That the Council be requested to take into consideration the mode of electing members of the Council, with a view to secure a more thoroughly representative body."

Papers and Communications. The following papers were read:—

1. Thoughts on Polypharmacy. By J. Vose, M.D.
2. Observations on the Nature and Treatment of Emphysema of the Lungs. By A. T. H. Waters, M.R.C.P.
3. On the Use of Sulphate of Aniline in the Treatment of Chorea. By J. Turnbull, M.D.
4. Case of Excision of the Os calcis. By G. Southam, Esq.
5. Brief Notes on the Diphtheria in Garston district. By T. R. Heywood Thomson, M.D.
6. A case of Ruptured Perinæum during unassisted Labour; with remarks. By T. Skinner, M.D.

Votes of Thanks. Dr. Stookes moved, Mr. Godden seconded, and it was resolved,

"That the best thanks of the meeting be given to the Readers of Papers, and that they be requested to forward them to the Journal for publication."

It was moved by Dr. Waters, seconded by Mr. Wilson, and carried,

"That the best thanks of the meeting be given to the Council of the Medical Institution for the use of these rooms on this occasion."

The Dinner. In the evening, sixty-one members and visitors dined together: Mr. Batty in the chair.

Temperature of Arctic Seas. If the fishes of the polar seas were well known, we should probably find the species much the same on every meridian; the temperature of the sea, when ice is present, varying but little near the surface. Dr. Sutherland found the mean in Davis's Straits and Lancaster Sound to be a little below +33° F., the range in these months being less than three degrees; but in September the surface water became a degree or two colder. In the Spitzbergen seas, the mean was +35½° during summer, according to Sir John Franklin's and Sir Edward Parry's trials. At considerable depths, the temperature is greater and more uniform, and a comparative uniformity of animal life is likely to prevail there. There is, however, one remarkable difference in the presence of sturgeons in the rivers of Asia, into which they ascend from the icy sea; whereas no sturgeons have as yet been detected in the American rivers which fall into the polar basin, not even into the Mackenzie, whose sources are situated so far south as to interlock with those rivers that fall into the Pacific and Hudson's Bay, and abound in fine sturgeons of several species. . . . . Trout of various kinds and of large size inhabit the rivers that fall into the Arctic Sea; and on the American coast, near the mouth of the Coppermine River, a species closely resembling the sea-trout of England was abundant in the shallows. The true *Salmo salar* is said to be rare in Siberia; but others of the genus, such as the *Kundsha*, the *Golzy*, and the *Lenok*, are common. In America, two, four, or five great trouts, and chars, like those of Greenland, people all the large lakes in the Arctic regions. (*Sir J. Richardson.*)

Special Correspondence.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

I think it may be permitted that your Edinburgh correspondent should occasionally wander a little from his proper field, to refer to matters of medical interest connected with the western metropolis of Scotland, all the more that you do not possess any special agency for supplying your readers with the medical news of that city.

The want of sufficient Infirmary accommodation in Glasgow has been long felt both by the public and by our colleagues in the profession; and this want has at length been supplied by the erection of a *new surgical hospital*, with arrangements and appliances so complete and satisfactory as to warrant a little notice of them. The site is in the immediate neighbourhood of the Royal Infirmary, and the institution is to be ruled by its managers. It is a building of four stories, with door and staircase in the centre, the wards opening from either side of the lobbies, and each story consisting only of two wards. There are thus eight wards, and as each contains sixteen beds, the hospital affords accommodation for 128 patients. The building is narrow, so that a ward extending from front to back may be lighted from both sides. There are eight windows on each side, that is, a window between each bed and its neighbour, and thus there is provided an abundant supply of that very valuable remedial agent—light. At the extremities of the wards are the nurses' rooms, sculleries, bath rooms, water-closets, etc. It certainly is a great advantage that, instead of one bath room common to the whole hospital, each ward possesses its own. In order to render the walls as smooth as possible, and so to prevent their affording a nidus for any noxious matter, the ground-floor has been plastered with Roman cement, and all the others with Portland, laid over with a layer of Keane's. To prevent the walls, which are of freestone, from absorbing and transmitting moisture, a thick layer of Portland cement has been interposed between the first and second courses of masonry. The wards are heated by means of open fireplaces in the centre of each, a square mass of masonry running through the middle of each side of the building for this purpose, an arrangement which promises to be practically efficient, although it materially mars the beauty of the ward. The ventilation has been most carefully attended to, and should it prove unsuccessful, that want of success cannot be ascribed to negligence. The arrangements are these: for the removal of the heated and impure air, there are three tubes passing perpendicularly through the centre of each ward, and having their exit above the roof, into each of which there are two openings. Four openings enter near the ceiling, two on each side, into the air-flues, and two at each end into the smoke-flues. Thus, while the fireplaces remove the lower strata of impure air, these various openings drain the upper. Independently of the doors, there are thirty-five separate apertures in each ward for the admission of fresh air; six of these enter along the centre of the ceiling at regular intervals, and communicate with the external air by grated openings in the side walls. There are also openings at the top and bottom of each window, connected with which, channels are formed for conveying the air upwards to the ceiling and downwards to the level of the floor on entering the ward. There is further a large opening covered with perforated zinc above each ward door, and fitted with louvres which can be opened and shut at pleasure. Thus the entrance of pure and the exit of impure air are provided for in every part of the ward. The opening, or inauguration of the hospital, was rather an imposing ceremony; and its dignity was contributed to by the presence of many gentlemen of position in Glasgow.

A few evenings ago, the Royal College of Physicians entertained the members of the profession in Edinburgh and the neighbourhood at the first of a series of *conversaziones*, to be held in their hall this summer. Dr. Alexander Wood, as president, occupied the chair, and performed the not very necessary task of introducing the lecturer of the evening, Professor Simpson. The subject which that gentleman had chosen was one admirably suited for such a meeting, as it was alike instructive, and capable of being made a vehicle of many entertaining tales and humorous illustrations. The subject was "The chief modern advances in practical midwifery." The word "modern" was in this instance applied to the period since 1818; and the lecture, which lasted about two hours, glanced at many departments, and the learned professor showed that in that time great improvement had taken place in all of them. In support of his statements he referred to numerous statistical tables, which amply proved all his positions, and he clearly showed that in no department of medical science has more progress been made than in midwifery. The introduction of anæsthetics itself is sufficient to mark the era with a great lustre.

An additional ward in the Royal Infirmary has lately been set aside for the *diseases of women*, and for this ward an additional ordinary physician has been appointed. Dr. Matthews Duncan, who has been a most efficient medical officer in the children's hospital, has been unanimously chosen; and doubtless his clinical lectures and daily visits will be of much service to the students who may follow him. A petition in favour of such an arrangement was signed by a large number of students; it is therefore to be hoped, that the opportunity thus afforded them of studying that department will be largely taken advantage of.

The University Mission to Central Africa. Letters have been received from Bishop Mackenzie by the secretaries of the mission organised to Central Africa under the auspices of the Universities of Oxford, Cambridge, Durham, and Dublin, stating that the right rev. prelate had commenced an expedition up the Rovouma on the advice of Dr. Livingstone, whom he had met. The bishop proposed in the first instance to go up the Shire, but yielded to Dr. Livingstone's more experienced representations. The mission party found Dr. Livingstone and his companions in good health.

Reports of Societies.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, June 5th, 1861.

W. Tyler Smith, M.D., President, in the Chair.

Case of Small-Pox in Twin Fœtuses. Dr. Madge exhibited for Dr. Graves, two fœtuses born prematurely at about the sixth month. On the body of one fœtus there were about sixty-five small-pox pustules; on the other, six only. Two months before delivery, the mother had had discrete small-pox; she had been vaccinated.

Dr. Gibb related the particulars of some analogous cases.

Hydatid Mole accompanying a Healthy Ovum of Six Months Gestation in a Twin Conception. Dr. Hall Davis exhibited a well-marked specimen of an hydatid mole, about a pint and a half in bulk, discharged from the uterus seven hours after the delivery of a living child and its healthy placenta. Labour had been prematurely induced in consequence of exhausting hæmorrhage. No trace of the second embryo was discovered, but there was, he thought, no doubt that there had been a twin conception. He had found two similar cases only on record.

ON UNUSUAL ELONGATION OF THE FŒTAL HEAD AS A CAUSE OF DIFFICULTY IN THE APPLICATION OF THE ORDINARY OBSTETRIC FORCEPS, WITH A DESCRIPTION OF A MODIFIED FORM OF INSTRUMENT TO BE USED IN SUCH CASES. BY GRAILY HEWITT, M.D., M.R.C.P.

The object of this communication was to direct attention to the occasional occurrence of difficulty in the application of the ordinary English forceps, produced by excessive elongation of the fœtal head during labour, and to insist on the necessity for using an instrument adapted by its form and size to the shape of the head in these exceptional cases. The author's attention had been directed to the subject by the fact, that in a particular case in which it was judged advisable to use the ordinary short forceps, a difficulty was experienced in applying them. After the labour had been subsequently completed, the head of the child, compressed and moulded to the shape of a narrow and unyielding parturient canal, was found to be unusually elongated in the occipito-mental diameter. The head measured in this diameter six inches, half an hour after birth. The actual size of the head was not anything remarkable. The kind of alteration in shape here noticed was such as is frequently observed in primiparæ; but the author had never had occasion before to notice such elongation in a case where the forceps was required. The difficulty experienced in applying the forceps was due to the fact, that the side of the head presented, owing to its elongation, a curve different to that ordinarily present, and the blade of the forceps used was not long enough, while, at the same time, it was too sharply curved, to meet the requirements of the case.

The occipito-mental diameter of the head, with which we are chiefly concerned in reference to the applicability of the forceps, measures, according to various obstetric authorities, from four inches and a half to five inches and a half. Van Pelt, who has recently published the results of his measurements in 700 cases, found the average to be five inches seventeen-fortieths. These measurements were made, not immediately after the escape of the head, but when sufficient opportunity had been given to the head to recover from the effects of compression during the parturitive act. No observations had hitherto been made for the purpose of ascertaining the difference between the measurement of the occipito-mental diameter during parturition, and at a period a few hours after the head had been born. The difference in question was known, however, practically to be considerable.

The relations subsisting between the curve and length of the blades in the ordinary forceps and the shape, and curve of the head in ordinary cases, and in cases of undue elongation, were next alluded to, and illustrated by means of drawings. Thus it was made evident, 1. That the ovoid presented by the head (as it is in ordinary cases) is such that the ordinary forceps, with a length of blade of from six inches and a half to seven inches, and a curve the arc of a circle, of from ten inches to eleven inches, is admirably adapted to it: 2. That when the ovoid exceeds five inches and a half in its long diameter, the forceps in question is likely to be inapplicable, and, as in the case alluded to, difficulty might arise in endeavouring to apply it. How often would such exceptional elongation be observed in practice? In Van Pelt's cases there were 28 out of 646 in which, some little time *after* the end of the labour, the long diameter measured five inches three-fourths. Hence in about three per cent. of all cases we may expect to find the head so long as to give rise to the difficulty in question, and this not taking into consideration cases in which there may be undue elongation, and a less degree of difficulty in cases where the head is of medium size, but yet unusually elongated. The author believed that the difficulty alluded to had been (how frequently it was impossible to say) encountered in practice by others though not recognised. To those who would object that, admitting the possibility of the difficulty occurring, it must yet occur very rarely, he would reply that, admitting the rarity of the occurrence in question, it was extremely desirable that it should be recognised, and that this or any other misconception likely to arise in connexion with the use of so important an instrument as the forceps should be removed. The only modification in the forceps hitherto admitted or insisted upon had reference to the *position* of the head in the parturient passage. No modification having reference to the *shape* of the head had as yet been insisted on. The latter principle was the one he wished to see adopted. The author exhibited to the society an instrument, constructed under his directions, the blade of which was eight inches long (instead of six inches and a half or seven inches), the curve that of a circle of fourteen inches (instead of ten or eleven inches), and identical in other respects with the ordinary short forceps used in this country. The curve more nearly approached that of the French instrument. The instrument thus modified would, he believed, be found applicable in the class of cases now under consideration—those in which the fœtal head is unduly lengthened. The cases requiring it would be easily recognised; the blade of the forceps, used as a probe, would inform the operator whether the shape of the head required one or the other instrument. The ordinary instrument used in this country was perfectly adapted to all ordinary cases, and it was only a further development of the principle on which that instrument was constructed to insist on the necessity for occasionally employing a forceps of which the blades were, by their length and shape, suited to the altered length and shape of the fœtal head. In the long, tedious labours of primiparæ the new instrument would be most likely to be called into requisition.

Dr. Graily Hewitt at the same time brought forward one of the original Chamberlain forceps in the possession of the Royal Medical and Chirurgical Society, and which, by the courtesy of the Council of that Society, he had been allowed to exhibit this evening, in order to afford the fellows an opportunity of comparing it with the instruments in ordinary use, and with the modified form of forceps now suggested.

Dr. Barnes observed, that it might be supposed that there was not much more to say upon the construction of the forceps. The forceps had exercised the ingenuity of more men than perhaps any other instrument, and certainly the literature upon this subject was more extensive. With reference to the measurements of Van Pelt and others, it was important to bear in mind that the dimensions of the fœtal head were very much a question of race. The American child's head was not of the same size as the English or the French child's; and if anyone desired to see heads developed in the most magnificent proportions, he should go to Ireland. It would not do, therefore, to take the fœtal measurements of one race and apply them to the obstetric theories of another. He (Dr. Barnes) had encountered the practical difficulty signalised by Dr. Graily Hewitt, but had not met it in the same way. At one time he was in the habit of using the Dublin straight forceps, which is somewhat longer than the one described by Dr. Hewitt as being in ordinary use in England. This instrument he had now abandoned; it was apt to split the perinæum. This objection he thought applied to all straight short forceps. To introduce this instrument, it was necessary to press the handles far back, stretching the perinæum backwards, and then during extraction, as the bow of the blades sprang directly from the handles, a great strain upon the perinæum was unavoidable. For some years past, he had used exclusively the forceps of Mr. Roberton, of Manchester. Being called upon frequently to apply the forceps, he was able to say that this instrument was admirably adapted to all the ordinary emergencies, whether the head lay at the brim, in the cavity, or near the outlet. The pelvic curve, the length of the blades, and the length of the shank, kept the perinæum free from any strain whatever beyond what was incidental to the passage of the head itself. The instrument added nothing to the danger to the soft parts. He wished to add, that it was not a fair representation of the application of the forceps to show it as embracing the head with perfect symmetry. The grasp was oblique, one blade lying on the right brow or temple, the other on the occiput or behind the line of the transverse diameter. This was the necessary consequence of the circumstance that the long forceps was introduced in the transverse diameter of the pelvis, and not with reference to the child's head. This he thought an important rule to follow. In some cases, with the head low in the pelvis, it might be possible to apply the short forceps with a blade on either parietal bone; but it was a bad practice. The pelvis should be the guide for the position of the forceps, not the head.

Dr. Braxton Hicks asked if Dr. Graily Hewitt had tried the long curved forceps in the case he had recited; because in a case of a like nature, to which he was called, there was similar difficulty in applying the short straight forceps; it was found impossible to bring them forward enough to lock, by reason of the pressure of the head against the brim in front of transverse diameter. Upon employing the long curved forceps, the end of the blade passed above the obstruction from behind, and then, using moderate compression, the head descended. He alluded also to the value of a very loose lock in cases where the blades of the forceps could not be brought opposite one another.

Dr. Tyler Smith thought there could be little doubt that in difficult labour, with great elongation of the head, the modification of the forceps now proposed would be found useful. He had for many years used an instrument about an inch longer in the blade than the ordinary short forceps, its great advantage being that the lock could always be kept outside the soft parts of the mother.

Dr. Graily Hewitt, in reply, said that it was satisfactory to him to find that the difficulty he had alluded to had been experienced by others. The object of the paper was to establish what had not yet been established in obstetric practice—viz., the principle of the necessity for adapting the shape and length of the blades to the varying shape and curve of the fœtal head. With respect to the particular instrument exhibited to the Society, which was intended for cases of excessive elongation, it was quite possible that by some it might be considered to be still further improvable by the addition of the pelvic curve; but he believed the straight form which it now possessed was the best, and it was, moreover, very desirable to complicate the instrument as little as possible. In the particular case related, he had not attempted to use the long curved forceps. He would remark, that the long curved forceps was no more fitted for dealing with such emergencies as those contemplated, than the ordinary short ones; for, in both of the instruments in question, the length of the blade itself was identical.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Tuesday, May 28th, 1861.

B. G. Babington, M.D., F.R.S., President, in the Chair.

ON SOME EFFECTS OF REFLEX NERVOUS IRRITATION PRODUCED BY SYPHILITIC DISEASE OF THE BONES OF THE SKULL. BY HENRY LEE, ESQ., F.R.C.S.

This paper was a continuation of one which the author presented to the Society during the last session. The particulars of three cases were then related, in which extensive and persistent ulcerations had occurred in different parts of the body. These ulcerations were accompanied, in the first case, with deafness and impaired voluntary power; in the second, with fits of long continued spasm of some of the muscles of the face and body; and in the third, with delirium and coma.

In one case, the ulceration had existed for a period of six years, and had destroyed the left eye and the left nostril; and in another, the ulceration had continued for a period of eight years, and had involved the whole of the skin of the right arm.

In addition to the above cases, the author referred to two other instances in which disease of the bones of the skull had produced marked nervous symptoms; and in one of these persistent and long continued ulcerations had been present. The author remarked that a state of chronic spasm may be produced in blood-vessels as well as in muscles by nervous irritation; and the *post mortem* examination of two of the above cases showed the irritation to have originated in the bones of the skull at a distance from the origin of any of the motor nerves; and he therefore concluded that, as the parts at the base of the brain were healthy, the nervous irritation (shown in different ways in different cases) depended upon reflex action. The same action which would produce spasm of the muscles at one time might produce spasm of the blood-vessels at another, and thus interfere with the process of nutrition. To this cause the author attributed the ulcerations in the above named cases.

The details of two *post mortem* examinations were particularly insisted upon. In both of these, the inner table of the skull had been extensively diseased, and had been the cause of disease of the dura mater. In both cases, the parts at the base of the brain were entirely free from disease: and it was particularly noticed, that in those situations where the diseased internal table had been removed (in one case artificially), the membranes of the brain were healthy; but in those parts where the diseased bone remained, that the membranes were also diseased. The conclusion drawn by the author was that, where portions of bone were exposed by disease, the external and middle tables might be removed by the trephine without any danger; and that where the internal table was diseased, and the locality of that disease was indicated, which it might be, by the exposed external table, then the whole thickness of the skull might be removed by the trephine. This operation of removing the whole thickness of the skull had been performed by the author now in six cases. In three of these, the symptoms for which the operation was performed were decidedly relieved; in two, there was less decided benefit; and in none did the operation cause any fresh complications. In five out of these six cases, the external table was denuded and diseased, and served as a guide to the exact locality of the disease of the internal table.

The following case was related by Mr. Lee, the patient having been sent to him by Mr. Edmunds, of Spital Square, a few hours only before the meeting of the Society. A man, twenty-five years of age, had an indurated chancre four years ago. He was not attended at the time by any surgeon; but was subsequently treated, but without attending regularly, by iodide of potash. He took no mercury until after the appearance of the following symptoms. Eighteen months ago a large swelling appeared over the left parietal bone. This was accompanied by considerable pain. In September last he was "took all at once" with a kind of fit, which lasted an hour. After this had subsided, the pain in the head continued, for a considerable period, worse than before. During this fit he lost his senses; but he has had several fits since, and has always retained his consciousness. The fits begin with a kind of "trembling pain" in the left shoulder, and this sensation gradually extends down to the tips of his fingers. The muscles in the hand and arm become quite stiff. After about a quarter of an hour the fit ceases, and leaves a dreadful "heavy pain" in the head, particularly at the top. This pain sometimes lasts for two or three days, and during its continuance he feels a great inclination to press the top of his head against something hard. After the last fit this pain continued for a week. When the fits occur he is conscious of what is going on, but "feels staggering," with a continued inclination, if on his legs, to press forward. He can speak during the fits, but feels little disposition to do so. He never passes more than a month or five weeks without being in bed for two or three days with pain in the head. On one occasion he had "cramp in the lower jaw," and "felt as if the skin was set." Before the pain comes on he hears a noise in his ears like the tramping of soldiers. He can place his finger upon the spot where he feels most pain—at the upper part of the parietal bone, a little to the left side. He remembers having had five distinct fits independent of the periodical attacks of pain. During the occurrence of these fits the fingers of the left hand turn pale, and remain so for two or three hours. None of the other limbs are ever affected.

The author remarked that in this case, as in those to which he had referred in his paper, there was, during the occurrence of the fits, an affection of the muscles of one particular limb and of the blood-vessels of the same part, as indicated by the bloodless condition of the skin. The seat of disease, as indicated by the pain, was at the top of the head, and unconnected with the origin of any motor nerves; and he therefore concluded that this, like the other cases contained in the paper, was an instance in which irritation of the dura mater by disease of the bone had, by reflex action, produced the symptoms which had been described.

Mr. Edmunds stated that the last case, to which Mr. Lee had referred, had come under his care. The patient had originally been the subject of Hunterian chancre, and had come to him afterwards for swelling of the glands, for which he had prescribed iodide of potassium. He had subsequently presented himself with a painful swelling of the parietal bone, bursa, tibia, etc. Twelve months afterwards fits came on.

At the conclusion of the meeting, Dr. Nelson exhibited to the society an inhaler, recently invented by himself; its claims to notice being, great ease and simplicity of action; perfect cleanliness; and an arrangement of the mouthpiece by which is secured economy in the use of any medicated ingredient that may be required for inhalation.

Correspondence.

LYMPHATIC ABSORPTION.

Letter from David Nelson, M.D.

Sir,—In the Journal for June 1st, at page 571, some observations are made by Mr. Henry Lee, respecting a particular passage in my recent paper upon the "Carbuncular Type of Disease." From the courteous and complimentary terms employed by Mr. Lee, it is due to him, while combating the inference which he draws from this particular passage, to explain that, while the main object of my paper was to enforce the principle of blood-tainting by absorption, and especially the absorption of septic matters, the allusions made to other poisons were only meant as affording examples for illustration; and that of the syphilitic virus was brought before the reader merely as giving a very marked and unmistakeable picture of the invasive march of such poisons upon the general system.

The expression "creeping from gland to gland," to which he takes exception, was used in order to draw attention to the visible progress of the enemy from one point to another, through a direct and particular route; but, though the words do admit, grammatically, of the inference drawn therefrom, yet it was not my intention to limit the process of absorption to the lymphatic system, or to deny the same power to the venous and arterial capillaries, or to the larger vessels themselves, either directly through a wound, or indirectly by imbibition, or endosmosis through their coats. I think Magendie clearly settled the true doctrines upon this subject long ago, in his chapters upon lymphatic and venous absorption.

As to Mr. Lee's declaration of the destruction of the syphilitic virus, as such, within the lymphatic glands, it is a matter of very high importance; and great credit is due to the investigator for employing his unusual opportunities, either for confuting or confirming such doctrine; but it is one into which I do not feel qualified to enter in any special manner. I shall, therefore, only remark that, while admitting absorption by veins, etc., I cannot but uphold that the same function is shared by the lymphatics, though they may have a greater vital power of modifying the matters so absorbed during their passage. I am free to confess that I cannot see any reason, either of a physical or physiological nature, why a subtle poisonous fluid might not pass through the lymphatics, enter the lacteal duct, and thence be diffused through the general mass of the blood; notwithstanding that a resistent reaction might be set up at every stage of its progress. My friend, and former colleague, Mr. Langston Parker, has expressed opinion so much in accordance with my own upon this subject, that I prefer quoting his words. He writes at pages 31 and 32 of his last edition as follows:—

"The virus absorbed from a chancre by the lymphatics is modified in its passage through them, and the first lymphatic gland or glands they enter, by becoming mixed with the ordinary products and contents of the gland itself. The virus acts as an irritant on the lining membrane of the lymphatics, which causes them to swell and inflame while the morbid poison is passing through them. If this condition go on to suppuration, the specific irritant must be so mixed up with pus and the altered secretions of the gland as to be with difficulty met with sufficiently pure to produce a characteristic syphilitic pustule when tested by inoculation."

And again: "It may be very readily conceived that the irritation produced by the passage of syphilitic poison through a lymphatic vessel and ganglion may excite in the neighbouring organs an inflammation which is not specific, but merely phlegmonous; and this appears to be the true nature of the case. M. Ricord opened a bubo which had succeeded to a chancre, the pus from which produced no result by inoculation. In the centre of the abscess, he discovered an enlarged lymphatic gland, presenting an evident fluctuation; this was punctured and tested by inoculation, and the characteristic pustule of chancre was obtained."

In conclusion, let me observe that whatever one's abstract opinions may be upon such specific points, they can only at last get settled by a specific experience; and, upon this ground, I am happy to receive any kind of information from special observers of this or that disease.

I am, etc., DAVID NELSON, M.D.

Birmingham, June 4, 1861.

INTESTINAL OBSTRUCTION.

LETTER FROM JOSEPH HINTON, ESQ.

SIR,—If I am not trespassing too much on your space, I crave a few lines in reply to Mr. Gay. As the subject is eminently practical, I have less hesitation in asking it.

I thank Mr. Gay for the courteous manner in which he has alluded to my paper; and in again writing, I do so with a similar wish to his, that truth may be discovered.

Mr. Gay remarks, "I cannot discover in it (Mr. Hinton's paper) that identity of theme or aim with mine, on which alone a comparison can justly be instituted between the two." I presume from the abstract of Mr. Gay's paper, that his *aim* was to mark out a certain class of obstruction cases, to wit, incarceration by band, as offering prospects of successful treatment under surgical interference; my *aim* was strictly similar; the difference between us being that Mr. Gay had in view *strangulation by band only;* whilst I have added to this *intussusceptio* and *twist.* I may be greatly in error in thus massing these different diseases together; but it must be remembered that I have so massed them only in reference to surgical treatment and character of attack, never intending to insist that there were no points of dissimilarity between them. There are such differences, as for instance, the discharge of blood in intussusceptio; still it can scarcely be denied that the three conditions alluded to have, at any rate, this in common, that there are but faint hopes of relief, save by operative interference. If this be conceded, I can see no objection to their being classed together for practical purposes as regards treatment.

Mr. Gay does not think "the boldest surgeon would feel himself justified in exploring," etc., "save for the purpose of releasing the intestine from an incarcerating band." This evidently appears the reason for his restricting his observations to that form; but here I must refer him to Case 88 in my table, where Mr. Erichsen explored, found twist of the sigmoid flexure, replaced the same; the bowels acted twice. The case was decidedly successful in the French view of the matter; the disease was cured, but the patient sank, yet it cannot be set aside that the operation was peculiarly satisfactory. The case is to be found in the *Lancet* for January 26th, 1850.

Mr. Gay holds out the hope that at some future time he may be able to point out the proper diagnostic marks of the several forms of intestinal obstruction. We must all rejoice to find that a subject so difficult and important is in the hands of one so calculated to perform it; and I can only express the hope that the day is near when these cases, which all practical surgeons know have been frequently elucidated by him, will receive this great addition to their literature.

I am, etc., JOSEPH HINTON.

Hinton, near Bath, May 1861.

HOMŒOPATHS IN VOLUNTEER COMPANIES.

LETTER FROM THOMAS BICKERTON, ESQ.

SIR,—The remarks of your special correspondent in reference to the fact of homœoquacks being attached to some of the Liverpool volunteer corps, and the duties of surgeons of brigades serving with them, require explanation from some of the "numerous body of mounted cocked hats" who have been appointed as the medical staff of these regiments. I cannot presume to answer for any but the brigade to which I am attached; but in it, I can assure your special correspondent, any gentleman having the slightest tendency to the quackery of homœopathy would not be admitted under any possible circumstances. Fortunately, *we* have no reason to fear any coercion in the medical department of the brigade; as our liberal minded and noble colonel, William Brown, and every officer of the brigade, are as untainted with the humbug of Hahnemannism as are the members of the medical staff.

Your special correspondent cannot feel deeper regret than we do that the lord-lieutenant of the county should have been so much misled as even to sanction the very questionable propriety of submitting the name of any gentleman to Her Majesty, as a surgeon or assistant-surgeon to any of the volunteer regiments, who could not be appointed to a regiment of the line, nor yet to any government medical office where legitimate medicine holds undisputed sway.

It is upon the individuals who forwarded the names of homœopathic practitioners to the lord-lieutenant that the odium should fall, as well as upon those irregular practitioners who so pertinaciously stick to the skirts of legitimate medicine. Indeed, there can be little doubt that, had they possessed the honesty to declare their belief and practice in *homœopathic medicine only* at the time of sending in their names for these appointments, they would never have had the honour of serving in Her Majesty's forces.

In conclusion, I have only to express my regret, with your special correspondent, that any gentlemen should be so weak minded as to serve in company with a homœopathic practitioner on the medical staff of any corps in the kingdom.

I am, etc.,
THOMAS BICKERTON,
Staff Assistant-Surgeon 1st Brigade Lancashire Artillery Volunteers.

Mount Pleasant, Liverpool, June 1861.

THE VIABILITY OF A CHILD.

SIR,—I consider that the *Lancet* made a great mistake in upholding Dr. Tyler Smith's views as to the viability of a child. The *Lancet* maintains that the question is to be decided simply by physiology; that the beating of the heart indicates life; and, therefore, that a child who has never breathed is *not* still-born. Why, every woman's abortion is a child, and now, according to the law, may be heir to property. Why! Is there not a *punctum saliens* a few days after conception? Moreover, physiologically, is a person quite dead when the heart ceases to beat? Are there not, even then, molecular changes going on which constitute growth?

It appears to me that the question does not depend on subtle physiological questions; but ought to be decided on a common sense view of the matter. A child *in utero* is dependent on its mother. It is not independent until it has breathed, and is quite free of the mother's support. Now, this state of things did not hold good in the case alluded to. I do not know your opinion on the subject; but, according, to my views, the doctrine propagated by the *Lancet* is founded on a false notion of physiology, and may be productive of very serious results. I am, etc.,

A Hospital Physician.

THE PROPOSED AMALGAMATION OF SOCIETIES.

Sir,—The *Lancet* appears to be as ill-informed with regard to medical intelligence as medical ethics. It has informed the public that the Pathological and Obstetrical Societies have declined to amalgamate with the Royal Medical and Chirurgical Society. As a member of the two former societies, I may state, that the respective Councils have, for reasons best known to themselves, declined to follow the example of the Royal Medical and Chirurgical, and summon their members to take their opinions on the question, so that the members have had no opportunity of expressing what they may think about the matter. But as an old Fellow of the Royal Medical and Chirurgical Society, I take the liberty, through you, to urge on the Council the necessity of the society taking on themselves to carry out all that was suggested by those who were in favour of amalgamation, viz., by forming committees to consider and report not only on papers that may be read before the society, but on any subject of interest that may come before the profession. This course they not only undoubtedly have the power, under their charter, to pursue, but it is believed their charter and bye-laws expressly desire them so to do. If the society will carry out this plan, and retain for themselves the whole of the premises in Berners Street, leaving the other societies to carry out their own views with a distinct and separate action, and *in their own houses*, I have no fear that eventually the Royal Medical and Chirurgical Society will become all that the original founders hoped that it might, and what the proposers of "amalgamation" sought for in the late movement. I am, etc.,

A Fellow of the Royal Med. and Chir. Soc.

[We are enabled to inform our readers that the Council of the Royal Medical and Chirurgical Society have already taken into their consideration the plan suggested by our correspondent.—Ed.]

JOURNALISM: ITS ABUSES.

Sir,—Two articles in your Journal—one on some observations in the *Lancet* on a late lunacy case, and the other commenting on a letter admitted into the *Medical Times and Gazette*, on the question of members of the profession meeting those who practise homœopathy in consultation—have occupied the attention of the profession in a greater measure than any I can recollect for a vast number of years; and what I gather from those with whom I have conversed on the subject is, that no journal can fairly and honestly discuss questions of this importance unless they are conducted by those entirely without the control of *private* influence, where the journals are not private commercial speculations. Now, sir, the editor of the *Lancet* never would have ventured to palm on the profession the article you have so justly commented upon, had he not felt that some excuse was necessary for an *individual*, even though at the expense of damaging professional morality. It was an act of private friendship, but a most indiscreet one.

The admitting into the *Medical Times*, and giving a *quasi* support to, the wretched *sophistry* of the writer of the letter ending with a reference to Scripture, is another proof for the necessity of the existence of a journal like the British Medical Journal. It is only, as in your case, when an editor is the mouthpiece —an *independent* one—of a large body of the profession, who dares not to let his private feelings or inclinations influence his opinions, that we can hope to get such subjects fairly treated.

You have lately more than hinted that there are leading practitioners in this metropolis who, forgetting what is due to their position, are, under one pretence and another, in the habit of meeting homœopathic practitioners in consultation. I hear that the College of Physicians are about to take this matter into their consideration. The Fellows of the College of Surgeons may, in a limited way, follow their example. They have, it is true, no means of bringing any such question before the College directly; but I would suggest that they may express their opinions by means of their votes at the annual election of members of the Council, and, at all events, see that pure blood enters there. At the next election there are six candidates, and it behoves the Fellows to inquire well if any of the candidates are guilty of this breach of professional morality; and, if they can satisfy themselves that any of them are so, to vote against them. No such men should have seats in the Council of the College of Surgeons. I am, etc.,

"Judex damnatur cum nocens absolvitur."

June 1861.

A CARD.

Sir,—Having occasion to enter a pastry cook's shop in the Lewes Road this morning, I was surprised to observe a large piece of cardboard in a conspicuous position on the counter, bearing this inscription in prominent type:—"Doctor Moore's Dispensary, 44, Round Hill Crescent. Gratuitous advice every morning."

Perhaps you would kindly give the Brightonians, and especially the advertiser, the benefit of further publicity in your Journal, as he appears to aim at notoriety.

I am, etc.,

A Member of the British Medical Association.

Brighton, June 11th, 1861.

National Dental Hospital. A meeting of dentists was held on Tuesday week, at the College of Dentists, Cavendish Square, for the purpose of taking measures to establish a "National Dental Hospital". The chair was occupied by Dr. Richardson, in the absence of John Brady, Esq., M.P., who was prevented from attending by his parliamentary duties. The Chairman said that this Institution was for the poor—for such as could not afford to pay the dentist's fee to attend them when suffering from dental diseases. There was no desire on the part of this Institution to interfere with the one already in existence; but, in a city so large, he believed that there was ample room for both these institutions. This Hospital was not merely metropolitan, but national —one for the benefit of the whole of the United Kingdom, and one which expected to receive subscriptions and patients from all parts of the world. It would be conducted on the most liberal basis, as far as possible, and without any petty jealousies. He concluded by moving "That an institution, to be called 'The National Dental Hospital', be now established; the Hospital to provide gratuitous and efficient aid to the poor in diseases of the teeth, and to include means of instruction to students preparing for dental practice as members of the College of Dentists." Mr. Hayman seconded the resolution, which was carried. Dr. Pavy, of Guy's Hospital, and Dr. Richardson, were appointed consulting physicians; Professor Erichsen and Mr. Spencer Wells, consulting surgeons; and Messrs. Waits, Merryweather, and Robinson, consulting dentists. Some other business resolutions were passed, and the proceedings were terminated by a vote of thanks to the Chairman.

Medical News.

Royal College of Physicians of London. At the Comitia Majora, held on Monday, June 10th, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the science and practice of medicine and midwifery, were duly admitted to practise physic as Licentiates of the College:—

Alexander, Edward Wm., Doughty Street, Mecklenburgh Square
Bell, James Vincent, St. Thomas's Hospital
Braine, Francis Woodhouse, Cork Street
Campbell, Francis Wayland, M.D., Montreal, Canada
Dixon, John, M.D., Bermondsey
Dudfield, Thomas Orme, M.D., Thurloe Place, Lower Norwood
Hoffmeister, William Carter, M.D., Cowes, Isle of Wight
Hubbard, H. W., St. Peter's Lodge, Kensington Park Gardens
Lieson, Frederick Joseph, Chester Infirmary
Marsdin, Frederick, Stainforth, Doncaster
Popjoy, Joshua Joseph Bird, Accrington, Lancashire
Powell, William Mark, Devonshire Place, Wandsworth Road
Smith, Thomas, Bridbury, Stockport
Tanner, Mark Batt, M.D., H.M.'s Hospital Ship *Dreadnought*
Williams, Samuel White Duckworth, Gloucester

The following gentlemen passed the *first part* of the professional examination on May 31st:—

Bell, James Vincent, St. Thomas's Hospital
Stevenson, Thomas, Guy's Hospital
Walford, Walter Gilson, St. George's Hospital

Royal College of Surgeons. At a meetings of the Council of the College, on Thursday, June 13th, the following members of the College were admitted Fellows:—

Archer, William, Montague Street; diploma of membership dated October 3, 1834
Bagshaw, Edmund Lloyd, Bath; June 19, 1835
Baker, Robert Large, Birmingham; March 26, 1841
Betts, Henry Augustus, Galt, Canada; May 4, 1832
Corbauld, Francis John; April 30, 1841
Mordey, William, Sunderland; March 4, 1825
Spencer, John, Bedale, Yorkshire; April 2, 1828
Swain, Paul William, Devonport; April 29, 1831
White, William, Bengal Army; June 27, 1836

University of Oxford. Degrees conferred in a Convocation holden on June 6th:—

Doctors of Medicine.

Gray, Edward Benjamin, Exeter College
Ogle, William, Fellow, Corpus Christi College
Wallace, Alexander, Trinity College

Bachelors of Medicine.

Morgan, John Edward, University College
Smith, Henry Fly, Exeter College
Willis, Francis, St. John's College

Apothecaries' Hall. On June 6th, the following licentiates were admitted:—

Bowes, W., Elham, Canterbury
Hughes, W. H., Warrington, Lancashire
Leach, A., Waterhead Mill, Oldham
Martin, T., Little Halton, Lancashire
Scott, N. G., Wappingham, Notts.
Smith, T., Bredbury, Stockport
Webb, J. W., Abersychan, Monmouthshire
Welch, C. H., Cambray Villa, Clapton New Town

APPOINTMENTS.

Cooper, Alfred, Esq., elected Surgeon to the Islington Dispensary.

Royal Army. The following appointments have been made:—

Hill, Staff-Assistant-Surgeon W. H., to be Assistant-Surgeon 35th Foot, *vice* Thiselton.
Mackintosh, Surgeon-Major W. H., M.D., Royal Artillery, to be Surgeon-Major 21st Foot, *vice* Nash.
Nash, T. L., M.D., 21st Foot, to be Surgeon Royal Artillery, *vice* Mackintosh.

To be Staff-Assistant-Surgeons:—

Allan, Assistant-Surgeon A., M.D., 17th Foot, *vice* Hamilton.
Newland, Assistant-Surgeon P. F., 5th Foot, *vice* Wales.
Ramsay, Assistant-Surgeon T., 20th Foot, *vice* Langston.
Stewart, Assistant-Surgeon W., M.D., 47th Foot, *vice* Speedy.
Thiselton, Assistant-Surgeon E., 35th Foot, *vice* Hill.

Royal Navy. The following appointments have been made:—

Baker, Edward J., Esq., Assistant-Surgeon, to the *Mutine*.
Bogg, E. B., M.D., Actg. Assist.-Surg. (addit.), to the *Chesapeake*.
Bolster, George, Esq., Acting Assistant-Surgeon (additional), to the *Victory*.
Fenn, Edwin, Esq., Acting Assistant-Surgeon, to the *Dragon*.
Fisher, Alexander, M.D., Surgeon, to the *Dragon*.
Greeve, R., M.D., Actg. Assist.-Surg. (addit.), to the *Chesapeake*.
Hurlstone, Michael O., Esq., Acting Assistant-Surgeon (additional), to the *Marlborough*.
Inman, Wm., M.D., Actg. Assist.-Surg. (addit.), to the *Chesapeake*.
King, Alfred, Esq., Assistant-Surgeon, to the *Isis*.
M'Cardy, B. H., Esq., Actg. Assist.-Surg. (additional), to the *Victory*.
Mulvany, John, Esq., Acting Assistant-Surgeon (additional), to the *Impregnable*.
Parker, James, Esq., Acting Assistant-Surgeon (additional), to the *Narcissus*.
Wynter, Hugh B., Esq., Acting Assistant-Surgeon (additional), to the *Impregnable*.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Bradbury, B., M.D., to be Assist.-Surgeon 34th West Riding R.V.
Halse, C. S., M.D., to be Surgeon 46th Middlesex R.V.
Kirkman, J. T., Esq., to be Assistant-Surgeon 12th Hants R.V.
Moore, O. A., Esq., to be Surgeon 1st West Riding R.V.
Sadler, P. L., Esq., to be Surgeon 9th Lancashire R.V.
Spencer, W. H., Esq., to be Surgeon 21st Lancashire A.V.

To be Honorary Assistant-Surgeons:—

Harris, T. H., Esq., 20th Suffolk R.V.

BIRTH.

Foote. On June 9th, at Kington, Herefordshire, the wife of *Gustavus Foote, Esq., of a daughter.

DEATHS.

Deshon. On June 7th, at Coulston Rectory, Wilts, Mary Isabella, wife of the Reverend Henry C. Deshon, M.D.
Evans. On June 6th, aged 14, Lucy M., youngest daughter of Benjamin Evans, Esq., Surgeon, Brixton.
Fox, Leopold B., Esq., at Dalston, aged 42, on June 5.
Gray, Henry, Esq., Surgeon, on June 13.
Johnson, W. S., Esq., Surgeon, at Port Natal, on March 11.
Keal. On June 6th, aged 22, Anne, wife of John T. Keal, Esq., Surgeon, Oakham.
Phillips, Benjamin, Esq., Surgeon, at 77, Gloucester Place, aged 56, on June 11.
Stace. On June 8th, at Manchester, aged 29, Howard, youngest son of Joseph Stace, Esq., Surgeon, of Southampton.
Ward. On June 15th, at Winkfield, aged 15, Katherine G., daughter of *T. Ogier Ward, M.D.

Navy Medical Supplemental Fund Society Bill. The bill has been read a second time.

Dr. Schönlein is said to have received an invitation to Windsor Castle.

Fifteen Physicians have been exiled from the Roman States in consequence of the discovery of proclamations and tricoloured cockades; so at least, says telegram.

A Seceding Secretary. At a meeting of the New York Academy of Medicine, held May 15th, the Secretary, Dr. T. G. Thomas, was prevented from reading the minutes, in consequence of a disturbance arising from a charge made against him of entertaining traitorous sentiments towards the Federal Government.

An Interesting Anatomical Specimen. The skull of Dick Turpin, under a glass shade, many years in the Morley family, of York, was one of the lots put up to auction at a sale of "genuine furniture" on Friday week, in Church Street, Soho. Dick's cranium sold for fourteen shillings, glass shade and all.

Revaccination. Great satisfaction is expressed at Washington with Surgeon-General Vanderpoel's Order for the vaccination of all volunteers in New York at the time of their enrolment. Small-pox made its appearance in several of the regiments in a somewhat threatening way more than two weeks ago. Several cases occurred while the troops were *in transitu* through New Jersey. The disease is now under proper surveillance, and the troops are being revaccinated.

Professor Meigs. It is stated that this distinguished physician is about to retire to his country residence, bearing the romantic Indian name of Hamanassett, about twenty miles southwest of Philadelphia, in the pursuits of literature and agriculture, and upon the composition of a work which he has long meditated upon the history of medicine.

International Exhibition of 1862. Her Majesty's Commissioners for the International Exhibition of 1862 have requested the following gentlemen to act as members of a committee in connexion with Class 17 (surgical instruments and appliances) of the approaching Exhibition:—William Lawrence, Esq.; Joseph Henry Green, Esq.; John Flint South, Esq.; Cæsar Henry Hawkins, Esq.; James Luke, Esq.; F. Seymour Haden, Esq.; James Paget, Esq.; and James Moncrieff Arnott, Esq.

Vaccination. A Bill published lately, the short title of which, if passed into a law, will be "The Vaccination Acts Amendment Act, 1861," provides that the guardians of any union or parish, or the overseers of any parish where the relief of the poor is not administered by guardians, may, by writing under the hands of any two of them, appoint an officer to institute proceedings for the purpose of enforcing obedience to the Vaccination Acts within their union or parish; and all expenses incurred by such officer, or by any registrar of births or marriages, or by any medical officer of health appointed under an Act of Parliament, in proceedings for enforcing penalties under the said Acts, shall be payable out of the poor-rates, unless the justices or court before whom such proceedings are had certify that the proceedings were improperly instituted. All penalties are to be paid to the officer making the complaint; but if the complaint have not been made by an officer, then they are to be applied to the relief of the poor.

British Asylum for Deaf and Dumb Females. The Annual Meeting of the friends of this Institution, the object of which is to educate ignorant female mutes, to teach them such trades as may enable them to support themselves, and to provide a home for the friendless and destitute among them, was held a few days ago at the Manor Rooms, Hackney. The report read by the Secretary stated that there are 17,000 deaf and dumb in the kingdom, and that 2,500 are located in the metropolis. During the past year several of the most intelligent inmates had returned to their friends greatly improved both in mental ability and disposition. The number of inmates was limited by the state of the finances. The asylum was supported solely by voluntary contributions; and, as the funds were very low, the Committee earnestly invited increased contributions. The receipts of the year, inclusive of a legacy of £500, which was placed to the reserve fund, were £1250. The expenditure was £577 : 8 : 6; and the balance £69 : 7 : 3. Dr. Bird moved the adoption of the report, which was seconded by the Rev. T. O. Goodchild, and unanimously agreed to.

St. Thomas's Hospital versus the Charing Cross Railway Company. This case was brought on Monday last before Sir W. P. Wood, in the Vice Chancellor's Court. On the 6th March last an injunction was issued to restrain the defendants from proceeding to take, under the compulsory powers contained in their act, any portion of the hospital property, unless they were prepared to treat for the whole site of the hospital. Since the injunction was issued the defendants had petitioned the House of Commons to suspend its standing orders so as to enable them to bring in a bill this session empowering them to purchase the portion of the hospital property which they required, without any obligation to purchase any more. This petition, with one counter to it on the part of the governors, was referred to the standing orders committee, and upon the report of the latter the house declined to suspend their standing orders. The case stood in the paper for this day upon a motion for a decree upon the merits; but in consequence of the absence of some of the leading counsel in the case it was ordered to stand over until the sittings after term.

The Encyclopædia Britannica. On the 5th inst., Mr. Black, M.P., gave a sumptuous entertainment to the contributors to the last edition of the *Encyclopædia Britannica*. Among whom we observed Sir John Herschel, Mr. Monckton Milnes, M.P., Mr. M'Culloch, Major-General Portlock, Mr. Caird, M.P., Mr. Robert Chambers, Mr. Bazley, M.P., Mr. Hepworth Dixon, Professor Masson, Drs. Letheby and Lankester, etc. After dinner Mr. Black proposed "The Health of the Contributors," and expressed his deep sense of the great obligations under which he was laid by the invaluable assistance he had received from them in carrying to a successful completion his great work. After alluding to the advantages conferred on the world by the labours of men of literature and science, he concluded by returning his warmest thanks to the contributors to the *Encyclopædia* for the kind and efficient support he had received from them.

Death of Dr. Smith, of Moffat. This much-esteemed physician breathed his last on the 3rd inst., at the age of seventy-two, after a residence as physician in Dumfriesshire of forty-five years (forty-three of it in Moffatt). The Doctor was remarkable for a combination of professional energy and skill, conscientiousness, benevolence, and humour, which made him a man of sterling value to society, and a racy and cheerful companion. Dr. Smith entered the Royal Navy as surgeon in 1804, and continued in it till 1816. During this war-period he saw a good deal of service in various quarters of the world, and he did not come on shore till he got a sight of the great enemy of the day, the emperor of the French, which he did when Napoleon delivered himself up to the Bellerophon in the Channel, where Dr. Smith happened to be at the time. The Doctor used to give a very graphic description of Napoleon's appearance on deck, and his astonishment and admiration when he saw how the British sailors obeyed their officers and handled the ship. It seemed quite to console the fallen hero. "Only look at these fellows," said he to General Bertrand, who stood beside him, "how would it ever have been possible to beat them?" When Dr. Smith left the sea he settled in his native vale of Lower Aunandale, and two years after he fixed his head-quarters at Moffat, where he remained till the day of his death. (*Dumfries Herald.*)

The Scotch Lunacy Act. A meeting of the medical profession of Scotland was held at Edinburgh on Friday for the purpose of memorialising the Lord-Advocate as to the modifications and amendments of the Scotch Lunacy Act. Dr. Alexander Wood presided in the absence of Professor Christison. The following resolution was moved by Dr. Peddie, and seconded by Dr. W. T. Gairdner, on the subject of granting increased power for the confinement of insane drunkards or dipsomaniacs:—"That many cases of excessive intemperance depend on disease, and continue a form of insanity. That such cases cannot be treated without confinement more or less strict. That in the present condition of the law such treatment is frequently unattainable. That some cases of the kind require treatment by confinement, not different from that enforced on other insane persons. That for many more a different system of treatment is desirable. That, although such a system of treatment has already been established in various institutions in Scotland, into which persons are admitted with their own consent, yet it seems necessary in certain cases to afford the means of enforcing admission into such institutions; and that such institutions should be licensed, subject to the jurisdiction of the Lunacy Commissioners, and conducted under such regulations as the Act may direct." Several resolutions were passed on the subject of the medical certificate, and some difference of opinion was manifested as to the propriety of the sheriff's jurisdiction being interposed between the medical certificate and the confinement of the lunatic. The following resolution was adopted by a large majority:—"That the existing form of the sheriff's jurisdiction in cases of insanity is objectionable, as tending to delay and obstruction in the admission of cases of urgency into asylums, and also as interfering with the physician's province, which is to judge of the circumstances under which treatment in asylums is required; and that the security of the public requires only that the competency and good faith of the medical men signing the certificate should be placed beyond suspicion; and that the Lord-Advocate be requested to take these circumstances into his consideration, with a view either to the amendment of the sheriff's jurisdiction, or to its being replaced by some other provision for accomplishing the object in view."

Memorial to Sir J. McGrigor. The admirers of the late Sir James McGrigor, Bart., have succeeded in obtaining from Her Majesty's First Commissioner of Public Works, a very eligible site in St. Margaret's Square, Westminster, contiguous to the Abbey and Houses of Parliament, where they propose to erect, as speedily as possible, a handsome marble statue, on a polished granite pedestal, on which will be briefly inscribed the nature of Sir J. McGrigor's services (extending over a period of fifty-seven years, in every quarter of the globe), which acquired so repeatedly for Sir James McGrigor the warmest eulogies in the public dispatches of the various general officers under whom he served. Sir James McGrigor was Chief of the Medical Department of the Army in the expedition against the island of Grenada; in the expedition under Sir David Baird from Bombay through the deserts of Thebes and Suez to Alexandria; and in the disastrous Walcheren expedition; moreover, he was present in the same capacity with the army in the Peninsula, from Ciudad Rodrigo to the final battle of Toulouse. He was also twice shipwrecked during his period of active service. To the medical officers of the army his name will always be associated with the two most invaluable institutions which he founded, and fostered, until the end of his life, with parental care—one, an Assurance Society, for granting pensions to widows; and the other a Benevolent Society, which has been the means of distributing many hundred pounds annually among the most necessitous orphans of medical officers. The Committee hope that they may now be soon enabled to proceed with the erection of the statue; and also that a sufficient amount may be collected for the foundation of an annual exhibition of a gold medal, to be called after his name, which will be awarded to some meritorious officer of the department. The Committee date from the Army and Navy Club, and John Wyatt, Esq., of the Coldstream Guards, is the Honorary Secretary and Treasurer.

The Census of 1861. The tables containing the general results of the Census, just printed, unfold nothing new nor startling. They simply indicate that during the last decennial period the normal rule of progression has operated with much the same force as during the preceding forty years. In the year 1811 the population of England and Wales stood at 10,454,529; this year it amounted to 20,223,746; that is to say, in the course of the half century it has almost doubled; and the progress has been in a constant ratio. During the first ten years the number added was 1,718,135; between 1821 and 1831, an increase of 1,879,322 took place; in the next decennial period, 1,983,212; in the next, 2,018,972; and in the decade just expired, 2,169,576. The absolute increase on each period is progressive, but the rate of increase diminishes—it is first 16 per cent., then 15, then 14, then 13, finally during the last ten years, 12 per cent. Should the same causes which have established this rule continue in operation, one hundred and thirty years must yet elapse ere the growth of population shall cease in England. A steady change in the distribution of the people is discernible in these tables. The figures only confirm what has been already inferred with a high degree of certainty from the known progress. Generally speaking, the towns and cities which depend on manufactures and trade for their existence show vigorous growth; the agricultural towns are for the most part stunted and decaying; and this by reason of the removal of the rural population into the great towns. Every county in England and Wales exhibits an increase on the period, save seven: these are Cambridge, Norfolk, Rutland, Suffolk, Wilts, Anglesey, and Montgomery. Huntingdon, Oxford, Somerset, Brecon, Merioneth, and Radnor have been little better than stationary. On the other hand, the counties which exhibit the greatest absolute increase are Lancashire, Middlesex, the West Riding of Yorkshire, Surrey, Stafford, Durham, Kent, and Glamorgan. In all the 623 districts of England and Wales there has been an excess of registered births over registered deaths within the ten years. The population within the metropolitan district is now 2,803,034; ten years ago it amounted to 2,362,236; the increase is, therefore, equal to 440,798. Now whence comes this increase? Contrary to general belief, by far the larger portion of it is due to natural increase—the proportion of it represented by immigration being only 164,591, as against 273,177 arising from excess of births over deaths. Some few districts of the metropolis have absolutely lost in population, but in all of them the births exceed the deaths. Among these, the most notable is London city itself, in which the resident population has fallen from 55,932 to 45,550, or nearly 20 per cent; yet there occurred nearly three thousand births more than deaths in the city during the period. Of the provincial cities and towns Liverpool stands at the head. Its population is now 443,874. Ten years ago it numbered 375,955. Next to it stands Manchester, with 357,604; then Leeds, 207,153; then Sheffield, 185,157; Bristol, 154,073.

The American Civil War from a Medical Point of View. Complaints are now being heard from various volunteer regiments concerning the quantity and quality of food which is provided for them. The soldier does not expect luxurious fare, but he certainly has a right to claim an amount of plain and palatable food sufficient to sustain him in the arduous duties incident to camp life. We are happy to state that this deficiency of supplies is not owing to the want of proper appropriations from the various State authorities, but is doubtless caused by the commissaries, who lack the necessary administrative qualifications. At a late meeting of the Advisory Committee of the Medical and Surgical Boards of the City Hospitals, the following resolution was adopted:—"That the physicians and surgeons of the New York, Bellevue, and St. Vincent's Hospitals be requested to organise classes of medical graduates and undergraduates, who have studied two years and attended one full course of lectures, for the preparation and registry of corps of Medical and Surgical Assistants in the Army." We understand that a register has been opened at the office of Dr. Valentine Mott for this purpose. We take this opportunity of urging all the younger members of the profession and the advanced students to seize upon the offer thus made to them, as one which promises very superior advantages for the acquirement of skill in minor surgery. In case of an engagement, such assistants to the recognised regimental surgeons will be much needed.—*Nurses for the Army.* A Systematic Course of Practical Instruction in Nursing and Hospital Hygiene has been commenced in the several hospitals of the city and at the Philosophical

Rooms of the Cooper Institute, under the direction of a Central Committee of Physicians and Ladies. The Ladies' Committee for Examining Volunteer Nurses meet at their rooms daily, from 2 to 4 p.m. Applicants who have been approved by that Committee, and by the Sub-Committee of the Hospital Boards, Drs. Isaac Wood, E. Delafield, and E. Harris, will be permitted to enjoy practical instruction in the hospitals.—Thirty physicians and surgeons are required for immediate service in the regular army of our government. The call is urgent, and the service patriotic; yet there is reason to fear that the strong temptation which is offered for enrolment in the medical service of the volunteer troops may prevent a sufficiently prompt response to the present call from the Surgeon-General at Washington. Patriotic young physicians, who would serve their country most effectually at this momentous crisis, should see to it that there be no lack of service in the Medical Department of the regular army. The more creditable basis and standing upon which surgeons of the *regular* staff are received is a sufficient reason for preferring that to the volunteer regimental service. The "Army Medical Board" will continue in daily session at the Metropolitan Hotel until the full complement of thirty shall be filled. Why should not some of the accomplished medical gentlemen who joined volunteer regiments in the capacity of assistant-surgeons, embrace the present opportunity to reap the honours of the regular service? The following official notice furnishes the proper directions to candidates:—"Surgeon-General's Office, May 16th, 1861. In consequence of the increase of the regular army, an 'Army Medical Board' has been convened, and is now in session in New York city, for the examination of candidates for admission into the medical staff of the army. Applicants must not be less than twenty-one, or over thirty years of age. Applications must be made to the Secretary of War, or through the Surgeon-General of the Army, stating the residence, place and date of birth, accompanied by respectable testimonials of moral character."—"In compliance with the expressed views of a majority of the members of the Association of Medical Superintendents of American Institutions for the Insane, the meeting which was called for June 11th, 1861, at Providence, Rhode Island, will be postponed for one year. John Curwen, *Sec.*"—Baillière and Brothers, of New York, have a work on Military Surgery in press. The author is Dr. Frank H. Hamilton, well known as an able writer on Surgery. (*American Med. Times.*)

Varieties.

Vaccination. In the year ending at Michaelmas last, the public vaccinators vaccinated 494,942 persons, 485,927 of them successfully. The successful vaccinations, therefore, of the public vaccinators alone were 70·5 per cent. of the births during the year.

Topical Treatment of Laryngitis. The merit of having first recommended topical medication by nitrate of silver in chronic laryngitis, although generally attributed to MM. Trousseau and Belloc, is undoubtedly due to Sir Charles Bell, who, so early as the year 1816, published a case in which he had successful recourse to it." (*Dr. J. H. Hughes.*)

Medicine among the Northern California Indians. Dr. Keeney gives the following account of medical treatment among the California Indians:—"They neither resort to the animal, vegetable, nor mineral kingdoms for a cure. Their philosophy of disease seems to be based upon the idea that an evil spirit of some dead Indian steals into the body and locates itself, and wherever the pain may be, there this spirit is. Their system of therapeutics is perfectly comparable with their notions of pathology. Their doctors are always females, and none are called to practise except those who are commissioned, as it were, by nature. When a young squaw happens to have a slight periodical hæmorrhage from the mouth, or any other part than the natural channel, or, in other words, vicarious menstruation, she is the one who is for ever afterward destined to heal the sick. The young squaw is not at all covetous of her calling; she dreads her profession, for on her failing to effect a cure, she loses her life. Her art of cure consists in working herself up into a mesmeric or hysterical condition, and then making gentle passes with her hand over the diseased part, and, lastly, plunging her fists into the muscles of her prostrate patient, as if she really was determined to tear out and expel the dead Indian's evil spirit in good earnest. Then, again, the doctress throws herself into a gladiatorial position, being surrounded by a dozen or more bucks, who assist in the performance by chanting and howling like so many demons, and then she throws herself with her whole might on her subject, clinching the part diseased, and, if she is lucky, she drags out the evil spirit (with a portion of her patient's skin) and dashes it into a vessel of water ready for that purpose. If the patient is satisfied that he is relieved of the dead Indian's spirit and the pain, all is right; but if the pain chances to return, the poor squaw loses her head under the tomahawk."

OPERATION DAYS AT THE HOSPITALS.

Monday....... Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.

Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.

Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.

Thursday..... St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.

Friday....... Westminster Ophthalmic, 1·30 p.m.

Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Tuesday. Royal College of Surgeons, 4 p.m.: Mr. Hilton, "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."—Zoological.

Wednesday. Geological.

Thursday. Royal College of Surgeons, 4 p.m.: Mr. Hilton, "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."—Zoological.—Royal.—Linnæan, 8 p.m.—Chemical, 8 p.m.

Saturday. Royal Botanical.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—June 8, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week......................	Boys .. 963 Girls.. 884	1847	1101
Average of corresponding weeks 1851-60		1594	1093

Barometer:

Highest (Tu.) 29.888; lowest (Sun.) 29.736; mean 29.822

Thermometer:

Highest in sun—extremes (Wed.) 110 degs.; (Sun.) 73.3 degs.

In shade—highest (Wed.) 66.8 degrees; lowest (Sun.) 46.6 degs.

Mean—53.3 degrees; difference from mean of 43 yrs.—3.7 degs.

Range—during week, 40.2 degrees; mean daily, 13.6 degrees.

Mean humidity of air (*saturation*=100), 83.

Mean direction of wind, N. and N.E.—Rain in inches, 0.34.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

The Cæsarean Section.—Sir: The perusal of your leader on the Cæsarean Operation, in this day's issue, reminds me of a solution of the difficulty suggested by Dr. Kergaradec, with reference to baptism of the unborn child, which I witnessed in Würzburg in 1841. I was attending the private course of midwifery given to graduates in medicine by Professor d'Outrepont; and among several memorable things that happened during my ten weeks stay at that charming town, it occurred that one of the parturient women was unusually long in labour. Professor d'Outrepont was in attendance with his class, and doubts were entertained as to whether the child would be born alive. The Professor accordingly, having made some remarks as to the requirements of the Roman Catholic Church in reference to baptism, took a large syringe, and inserting the nozzle into the vagina, baptised the child in the name of the Father, the Son, and the Holy Ghost.

I am, etc., A Hospital Physician.

June 8th, 1861.

A. S.—We are glad to be able to satisfy the scruples of our respected correspondent, by assuring him that the words "Lord Shaftesbury and Co.", in an article on "The *Lancet* and the Lunatic", referred to His Lordship solely as Chairman of the Lunacy Commission.

A Subscriber.—The boards for binding the Journal of 1860 can be obtained at the office.

SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 1861.

COMMUNICATIONS have been received from:—Mr. Augustin Prichard; Dr. Edward Smith; Mr. Wm. Copney; Dr. Thomas Skinner; Mr. J. Gardner; Dr. Sieveking; Dr. Wilks; Mr. A. H. Dolman; Mr. Hugh Norris; Mr. Oliver Pemberton; Mr. Alfred Cooper; Dr. T. Radford; Dr. R. Wollaston; A Correspondent; Mr. R. Gillard; Dr. T. Littleton; Mr. G. May, jun.; Dr. J. B. Pitt; Dr. G. M. Humphry; Dr. B. Chevallier; Dr. Waters; Mr. Joseph White; Mr. R. C. Hurst; Mr. C. H. Roper; Dr. Styrap; Mr. G. Foote; Mr. C. Sloper; Dr. Munroe; Mr. H. Ormerod; Mr. J. Sharp; Dr. Thorburn; Mr. D. K. Jones; Mr. S. Wood; Mr. P. Martin; Mr. R. S. Fowler; Messrs. Newbery; Dr. McWilliam; and Mr. Stone.

BOOKS RECEIVED.

1. The Genealogy of Creation. By Henry F. A. Pratt, M.D. London: 1861.
2. Household Medicine. By J. Gardner, M.D.
3. On Food and its Digestion: being an Introduction to Dietetics. By William Brinton, M.D. London: 1861.

ADVERTISEMENTS.

Medical.--Wanted immediately, an ASSISTANT competent to Visit, Dispense, and Attend Midwifery. Unexceptionable references as to character required. —Address C. S., Tredegar, Monmouthshire.

Pepsine.—The Liq. Pepsiniæ, as used and recommended by Dr. Nelson, can be had from Messrs. W. & C. R. TITTERTON 6, Snow Hill, Birmingham.

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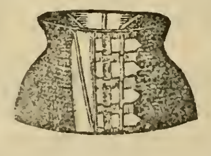
3 and 4 oz. ditto ditto	7s. 6d. ,,
½ oz. Moulded Phials	4s. 6d. ,,
1 oz. ditto	5s. 6d. ,,
1½ oz. ditto	6s. 0d. ,,
2 oz. ditto	7s. 0d. ,,

NOTICE.—S. Isaacs and Son beg to return their sincere thanks to the Medical Profession for past favours, and beg to inform them that in consequence of the great increase in their business, they have removed to more extensive premises, and hope by adhering to their usual attention and punctuality to receive a continuance of their favours at their new London Warehouses, 24 and 25, Francis Street, Tottenham Court Road. Packages free. Remittance on receipt of Goods. Post-office Orders payable to S. ISAACS and SON, at the Post Office, Tottenham Court Road. Bankers—Unity Bank.

J. & E. BRADSHAW, late
Shoolbred and Bradshaw, 34, JERMYN STREET, beg to call attention to the various



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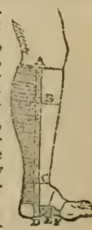

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A female to attend on Ladies.

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British Medical Journal.— Office, 37, GREAT QUEEN STREET, LINCOLN'S INN FIELDS, LONDON, W.C.

Advertisements ought to be delivered and paid for at the Office on the Thursday preceding publication; or if not paid for at the time, should be accompanied by a respectable reference.

Post-Office Orders are to be made payable at the Western Central District Office, High Holborn, to Thomas John Honeyman (the Publisher), 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

Original Communications.

RECENTLY OBSERVED FACTS RELATIVE TO THE PATHOLOGY OF THE PROSTATE.

By Henry Thompson, F.R.C.S., Assistant-Surgeon to University College Hospital, etc.

I.—Hypertrophy of the Prostate.

Hypertrophy of the prostate was long considered the natural inheritance of men in advanced life. Within the last few years, the grounds of this belief have been questioned by some observers. In 1855 and 1856, I prosecuted some researches on this question, and endeavoured to apply to it the numerical method, for the purpose of ascertaining, if possible, what proportion among elderly persons was affected with hypertrophy of the prostate. The result was, that I exhibited at the Medical and Chirurgical Society in 1857 fifty preparations, being the prostate glands from as many individuals. Of these, forty-three were aged 50 years and upwards (thirty of them being above 60 years), and all had been the inmates of a single metropolitan institution, from which they had been taken in the order of their appearance in the dead-house, without any selection of cases. From an examination of these specimens, it appeared that hypertrophy is an exceptional condition among elderly persons; that not more than one in three of this series were affected, as determined solely by anatomical examination; and that not more than one in eight had been the subject of any signs or symptoms of hypertrophy during life. (*Trans. Med. Chir.*, vol. xl, 1857.)

Subsequently my friend Dr. Messer, of the Royal Naval Hospital, Greenwich, pursued the inquiry; and, taking advantage of the great opportunities afforded by that noble institution, he obtained one hundred prostates from individuals of 60 years and upwards. The results of his examination, which corresponded in a remarkable manner with my own, form a valuable and interesting paper published in the last volume of the *Medical and Chirurgical Transactions*, and treating of the frequency, the nature, and the seat of enlargement, as well as of the frequency of symptoms, average ages of affected and non-affected, etc. (*Trans. Med. Chir.*, vol. xliii, 1860.)

Since that time I have continued the investigation, obtaining from the same field, through the kind assistance of my friends Dr. Fisher and Dr. Davis, thirty-four more specimens, which I have similarly dissected and examined, and which are now, with many others, preserved by me for other purposes, in the possession of the Royal College of Surgeons as wet preparations.

The total of one hundred and sixty-four prostates of 60 years and upwards, thus furnished, putting aside the twenty specimens from my first series which were below that age, may be regarded as presenting data sufficiently numerous to enable us to decide with an accuracy adequate to all conceivable purposes the proportion in which certain abnormal conditions affect the organ among men of advanced years. The results of the inquiry are extremely interesting in several particulars.

It may be premised, that all these organs were taken from the bodies of individuals of the required age, as they consecutively appeared in the dead-houses of the institutions alluded to; the object having been to obtain average lives as they occurred in those classes of the community which are met with in such institutions.

The ages of the 164 individuals ranged between 60 and 94 years. The mean of their united ages was 75 years and a minute fraction.

Of these 164, 108 were absolutely free from any sign of hypertrophy; the remaining 56 were affected in a greater or less degree.

Of the 56 cases of hypertrophy, 26 were marked specimens; *i. e.*, examples which weighed 10 drachms and upwards (10 drachms to 48 drachms). The other 30 were slighter, but undoubted examples, weighing less than 10 drachms.

Of the 56 cases of hypertrophy, nearly one-half made no complaint respecting symptoms during life.

It is to be recollected, however, that it is exceedingly common for slight deviations from the normal function to take place in elderly persons, without complaint being made; it is not, therefore, to be inferred that no symptoms of the existing enlargement were present. Most probably an inquiry would have elicited the fact that it was the habit of many of these patients to rise two or three times during the night to relieve the bladder, and that their frequency of micturition during the day was greater than that of the healthy subject.

From these data, therefore, it appears that actual hypertrophy of the prostate exists in about 34 per cent. of men at and above 60 years of age; and

That it produces marked symptoms in about 15 or 16 per cent.

The following results of the investigation are interesting.

The average age of the 108 individuals unaffected with hypertrophy was 75.02 years.

The average age of the 56 individuals affected with hypertrophy was 75.03 years. For all purposes, these two amounts must be regarded as identical.

The average age of those in whom the enlargement was considerable, 26 in number, was 74.46 years.

The average age of those in whom the enlargement was less considerable, 30 in number, was 75.53 years.

These results correspond very nearly with those obtained by Dr. Messer from his own cases alone.

It is most important to bear in mind that all these cases were placed in favourable hygienic conditions, and had the benefit of constant and careful medical supervision. Had they wanted both or either of these advantages, the result must have been greatly different, judging from the result of neglected cases among the poorer classes. Prolongation of life in the later stages of the affection depends mainly on the concurring existence of the two conditions named. This fact is one of considerable importance, and ought to be known to those who are the subjects of this complaint, since they are often prone to regard it as necessarily tending to shorten the natural term of life. They are entitled to the benefit which a more cheering view of their condition and prospects cannot fail in most instances to impart.

Among the 108 unaffected by hypertrophy were individuals of greater age than any among the affected portion; for example, 3 above 90, and many above 80 years of age. But, among the 56 hypertrophied cases, there were no less than 14 of 80 years and upwards, one reaching 87.

Besides the 164 cases thus analysed, were 20 specimens below 60 years of age, which formed part of the first series of 50. Among them were 13 cases between 50 and 60 years; only one of these exhibited any sign of hypertrophy; the age was 56 years; the enlargement was slight, evidently in the early stage, and affecting pretty equally the whole organ. I have never seen the affection at so early a period as 50 years of age. Enlargement existing before that age is unquestionably due to chronic inflammation, and is wholly different from hypertrophy.

ON LACERATION OF THE PERINÆUM.

By James Gray, M.D., F.R.P. and S.G., Glasgow.

I have read Dr. Graily Hewitt's practical observations on the treatment of the perinæum in labour. Setting aside his general remarks on this subject, some statements appear to demand fuller explanation, whilst a careful perusal of the paper in question leaves the mind in doubt on essential points, which might be made sufficiently plain.

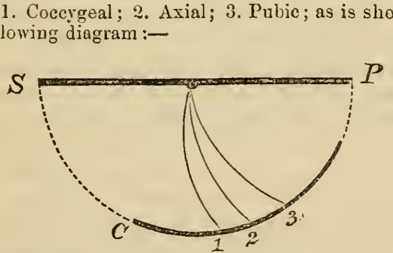
Dr. Hewitt says:—"A careful survey of the facts on record, and the history of the subject generally, have led me to the conclusion that when laceration is actually threatened, the proper treatment would be to procure additional space by making a slight incision on each side of, and at a short distance from, the fourchette." Dr. Hewitt is not aware, seemingly, that Professor Simpson of Edinburgh has for many years had recourse to this mode of treatment; and I know of two cases where Dr. Drummond of Glasgow operated in the manner referred to by Dr. Hewitt. Dr. J. G. Wilson of Glasgow likewise operated in the same manner eight years ago.

Another remark is as follows:—"The proper method of retarding the head would seem to be that recommended by Dr. Leishman, namely, to oppose the fingers inserted within the vagina directly against the head itself."

Fifteen years ago, I was taught this; and the late Dr. Wilson of Glasgow adopted and recommended such a line of practice; and I believe it is well known to most obstetricians; and to hold up Dr. Leishman as the originator of this idea is simply absurd; neither does Dr. Leishman, in his paper, make any such pretentions.

Dr. Hewitt, however, seems to have overlooked the main point in question, namely, why laceration in natural labours takes place in one case, and not in another. In his paper, he takes it for granted that the perinæum in every female is alike in its anatomical relations.

I hold there is great diversity in its position, its length, and its relation to the pubis and coccyx. The pubic margin of the perinæum or fourchette in one female is nearer the symphysis pubis than in another, while in a second it is nearer the coccyx; in a third, it holds an intermediate place, and so on; but I will class these diversities into three orders, which I shall designate—1. Coccygeal; 2. Axial; 3. Pubic; as is shown in the following diagram:—



In the first, or coccygeal, the labour progresses and terminates without rupture of the perinæum, as the perinæum is behind the axis of the outlet, and is not carried forward by the presenting part of the child's head as it emerges under the arch of the pubes.

In the second, or axial, the perinæum holds a mid position, and, consequently, in such cases a slight rupture is apt to take place, as from the intermediate position of the fourchette, the presenting part of the head stretches and carries a portion of it forward.

In the third, or pubical, laceration can hardly be prevented; in this order the fourchette is anterior to the axis of the outlet, and as the head emerges under the pubic arch, it pushes the distended perinæum forward funnel shaped, stretching it, in many cases, from three to five inches; as the bones do not give way, the head is more inclined to pass in the axis of the outlet.

I think this view of this subject sufficiently explains why rupture does not follow, in all cases, the birth of the child.

Dr. Hewitt says that supporting the perinæum "must be rejected." I hold that by gently supporting the perinæum in the second and third order, and guiding the head of the child forward in the direction of the abdomen of the mother, in the great majority of cases, we may prevent laceration; at all event, it greatly lessens the rent.

Of 2896 cases attended personally, in only one did laceration occur and extend into the rectum. When this happened, the perinæum was not supported; the labour was not rapid; neither was the head of the child very large; nor was there any deformity in the parts of the mother. I believe this accident might have been prevented.

As an auxiliary, chloroform ought not to be overlooked; for it is well known that under its influence the perinæum becomes relaxed, and danger to that part is thereby very much lessened.

Conflict of opinion suggests an opposite line of practice, and a certain amount of truth may be on both sides. It would seem, therefore, to be practical to adopt a middle course without entirely rejecting either recommendation.

Abstract

OF

CASES OF POISONING BY ARUM MACULATUM.

By W. Frazer, M.D.

[The following cases are published by Dr. Frazer in the *Dublin Hospital Gazette*. They occurred in the practice of Dr. Nugent of Belturbet.]

Case I. John M'Call, aged 6 years, was found by his mother, about two hours previous to my seeing him, lying on the roadside on his face, "in a fit," as she termed it, which continuing, she brought him to me. I noticed that there was great spasmodic action of all the muscles of the body, and bloody frothing at the mouth; the pupils were widely dilated, the eyes set and staring, his hands clenched, and the tongue was bitten; there was also a peculiar choking noise in the throat, similar to that heard in persons whilst in a fit of epilepsy; the lips and face were livid, the heart's action very feeble, the pulse weak and intermitting. These convulsive fits lasted each for about five minutes, and then ceased for an interval of nearly the same time; towards the end of each fit, the muscles of the face were affected by a peculiar twitching. I found it almost impossible to get anything swallowed, from the little patient's mouth being kept rigidly closed. I however managed, after a time, to get some solution of tartar emetic down, and I kept strong aqua-ammoniæ applied at intervals to the nostrils. There was not enough of the antimony taken to cause vomiting; but shortly after he had two or three evacuations of very fœtid fæcal matter from the bowels; and from this time the fits became shorter in their duration, and much less violent. All this occupied an hour and a half, during which I also applied sinapisms to the chest. The pupils now showed some evidence of being acted on by the stimulus of light, and the little fellow began to shout, as if afraid of something (apparently of guns being fired at him, and of devils).

He now became able to swallow, when a teaspoonful of fluid was introduced into his mouth; and shortly after, I obtained warm coffee, of which he took a teacupful with much eagerness. Sinapisms were reapplied to the chest and to the nape; and I gave him a bolus of calomel and jalap late at night. At 11 P.M., he was still insensible when spoken to; but when drink was given to him, he could swallow it, with difficulty, however, as if there existed great irritation of the throat and pharynx. Next morning, he was sensible but drowsy. Pulse 100. I kept him quiet in bed, and in a few days he was quite recovered.

Case II. John Sides, aged 8 years, was found on the roadside in somewhat the same state as M'Call, suffering from convulsions, and with his pupils widely dilated; he could walk, but could not see where he was going; the spasms he suffered from were not so violent as those which M'Call had. He got an emetic of sulphate of zinc and ipecacuana, which caused free vomiting of greenish matter, resembling chopped spinach; after this, he took warm coffee, which he drank with much eagerness; the first cupful of it was vomited, but the second remained on his stomach. He had recovered so far, that after two hours he was able to walk home, although he had to be carried to me. I desired him to be kept quiet, and to have a purgative of calomel and jalap; this acted freely on the bowels, and next day he was quite well.

Case III. A fatal case is recorded by M. Cangella in the *Gazette Medica di Porto*, and quoted in the *Pharmaceutical Journal*. A child, aged 3 years, having masticated, on April 20th, 1860, at 2 P.M., some roots of the arum, complained immediately of burning pains in the mouth and lips; three hours afterwards, it was in a state of profound torpor, to which succeeded a violent febrile reaction. At eight o'clock, M. Cangella found the little patient in a prostrate condition, unable to speak, raising its hands frequently to its mouth and throat, and uttering at intervals a sharp cry, and starting up as if suffocated. He observed that the caustic action of the plant had extended to the lips, the palate, the tongue, the tonsils, the pharynx, and wherever he could see; the pain of the stomach, on pressing it, indicated that the child had swallowed the juice, and that its caustic action had extended thus far. Not having any means at hand to produce the evacuation of the poisonous matter, he administered a solution of common salt, but deglutition was impossible; the swelling was such, that he could not introduce a probang into the œsophagus. The most energetic revulsive agents were employed without success, and death took place at eleven o'clock, during delirium from asphyxia.

From these cases, says Dr. Frazer, independent of others contained in our standard works on Toxicology, it will be seen that the acrid characters which are so distinctive of this tribe of plants exist in a sufficiently active form in the arum maculatum, our only British example of the order. In addition to the symptoms of local irritation which it causes, we notice convulsions, widely dilated pupils, insensibility, and coma; all evidence that it exerts an action on the brain and nervous system, as well as its purely local and irritating effects upon the mouth, fauces, and stomach; and as we know of no antidote for this or similar poisons, our only hope lies in their being ejected from the stomach as soon as possible after they have been taken. To effect this desirable result, and, indeed, as a generally available emetic in emergencies, I know of nothing better than melted fresh butter given freely, and its action should be aided by tickling the fauces. Of course, if sulphate of zinc be forthcoming, it too should be employed without delay, and afterwards the strong coffee used by Dr. Nugent appears to be the best thing we can make use of.

British Medical Journal.

SATURDAY, JUNE 22nd, 1861.

THE COLLEGE OF SURGEONS: ELECTION OF COUNCIL.

The forthcoming election at the Royal College of Surgeons, for the purpose of filling three vacancies in the Council, assumes this year an unwonted importance, and on several grounds. The most prominent circumstance in connexion with it is, that an attempt will on this occasion be made to strike a blow at the ordinary system of re-election. The retiring members, Messrs. Bishop, Mackmurdo, and Solly, it appears, are not to be allowed, as has been the practice in times past, to quietly retake possession of their vacated seats, but are to stand the chances of a contest with three other fellows of the College, who have not yet enjoyed the honour of a share in the deliberations of the Council. We need hardly say that the proposed opposition to the reelection of the three retiring members does not arise from any personal feeling against those gentlemen, for they are all men respected in the profession. The opposition is taken up on quite other grounds—in fact, for the purpose of asserting a new principle in the mode of election of Council.

The whole question thus opened is indeed one of great interest and great importance to the whole profession; and we shall therefore endeavour to explain the subject to our readers, as shortly and fully as may be. We do so especially for the reason that we believe a considerable number of the fellows and members of the College of Surgeons are far from being masters of the whole history of the case.

In the good old times, before the charter of 1843, the Council of the College of Surgeons consisted of eighteen or twenty members, who (as was the practice with corporate bodies in those days) judiciously elected themselves. This process saved a deal of trouble; and there was no questioning outside the doors. But by the charter of 1843, and the supplemental charter afterwards obtained, five hundred fellows were started into life, and to them was committed the charge of electing the members to the Council; and the Council was at the same time increased in number to twenty-four.

Of course the old members of Council—those who were elected under the old system, and in possession of the honours and the pisces when the charter was obtained—were left in quiet possession of a life-membership; but all members of Council elected subsequently to the date of the charter were to be elected by the fellows of the College, and subjected to periodical elections about every five years, three of them going out of office every year in rotation. But whoever thus went out by rotation was eligible for re-election.

Now the custom—and we all know what a law custom often becomes—has hitherto been to re-elect, as a matter of course, the three gentlemen who went out by rotation; and, consequently, members of the Council under the new charter have hitherto looked upon their tenure of office as being as secure under the new as it was under the old *régime*.

The fellows in this way have taken no benefit from their privileges; and the result of this mode of proceeding has been, that the infusion of new blood, or, as some would say, of life, into the Council has been but small. In fact, it was only by death or resignation of a member of Council that a vacancy could occur under such terms of tenure of office. We may calculate that, since the date of the new charter, there has not been one new vacancy *per annum* presented for filling up to the fellows by one of their number.

Now the fellows have long thought—many of them, at least—that this state of things is not in due accordance with the spirit of the times, as it is called, and, in fact, with equity and the requirements of the case. The number of the fellows has greatly increased of late years, so that they now form a body of something like twelve hundred first-class strength, all eager for and worthy of taking honours. They also are aware of their power, and have begun to think that it is time they exercised it. Some of them have, therefore, on this occasion, and for the first time since the date of their new charter, determined to alter the quiet regular course of things. If, they say, we do not reform or alter the ordinary proceeding, then a large number of our first-rate surgeons will never be able to shine in the Council-sphere; and those who do come in will arrive at the honour only when about to quit the stage of life. Moreover, they say, if it should so happen that there is a fellow of the College who is especially conspicuous by his position as a surgeon, and by his scientific attainments, who is especially deserving of being raised to the dignity, why should he not, at the pleasure of the fellows, be so raised, and not be compelled to wait for that day of routine entrance which may after all, perhaps, never come to him?

These, as we understand the case, are the reasons which have brought about the present unprecedented election. There is not, as we have stated, the slightest shade of disrespect shown in this to the three gentlemen of the Council who now offer themselves for re-election. Their only misfortune is, that they happen to be the triumvirate on the occasion of whose retirement the new experiment happens to be tried.

We have no kind of hesitation in saying that we sincerely trust this reformation—for we may fairly call it so—will be carried out. There are many very obvious disadvantages in men holding, either *de jure* or *de facto*, offices of the nature here concerned, for life. It is prejudicial to the interests which they represent, and is most unfair to the numerous worthy fellows of the College who are awaiting for and are deserving of a seat in the Council. It prevents that invigorating growth and rejuvenescence which should be represented in all progressive institutions. Besides, the examiners of the College are chosen from the Council; and the examiners of men of the present day ought, for the plainest reasons, not to be wholly drawn from men who were students of medicine a generation gone by. *Vita brevis; ars longa.* Life is limited; but the medical and surgical art has many a long stride yet to make before it approaches perfection. The examiners, therefore, should keep pace with the examined.

Such being the present condition of professional sentiment, we find that, on the one hand, Messrs. Bishop, Mackmurdo, and Solly this year are called upon, as the phrase is, to go out of the Council by rotation; and of course (according to the old style, and as we daily read of at boards of direction) offer themselves to the fellows for re-election. And that, on the other hand, to disturb this old system of quietism, and inaugurate a new era of fellowship-elections, Messrs. Paget, Adams, and Fergusson offer their claims and services to the attention of the electors.

To the principle involved in this proceeding, as we have already said, we heartily give our assent; and, if it be practically recognised on the present occasion, then we may be very sure that the tenure of office by members of the Council will in future be limited to a fixed period—say to five or ten years.

With regard to the position of the new men, we may remark that Mr. Adams, according to rotation of seniority, stands first on the list for election whenever a vacancy may occur; but, unless the vacancy is created by some new process of this kind, he, like many other men of high surgical standing, will probably never live to taste the sweets of office at the College.

Mr. Paget of Leicester is a still older member of the College than Mr. Adams; and, though he is not the next in redtape rotation, still he is every way eligible for the honour of office. We are certain that he will receive on this occasion the cordial support of the fellows of the College, and especially of members of the British Medical Association. That he is a country fellow is the very reason why he should be returned to the Council. Men of his stamen from the country will usefully and pleasantly leaven and invigorate the urban body. That he lives at a distance from London in no way detracts from his eligibility. This is his affair. He receives due notice, which enables him to attend all meetings; and, if he choose to sacrifice the requisite time and trouble, he is as well able as any other man to do the work of the College. And every one knows that, if Mr. Paget takes office, he will do the duties of it as well as the best of his co-officials.

Mr. Fergusson's name stands low on the list of members of the College; but this is felt to be his misfortune and grievance, and not his fault. If it stood as high as it does on the list of the Edinburgh College of Surgeons, then Mr. Fergusson would, even according to the old manner, where "each second stood heir to the first", have a chance of mounting to the dignity of Councillor. But as it is, if the old plan of election be not abrogated, then he can never hope for office, unless the Centenarian Society carry out in practice their scheme for prolonging life. Mr. Fergusson's case has, indeed, given to the whole matter its especial prominence. His peculiar position (as above specified), so low down on the list of the College, and so high up as a surgical authority amongst surgeons, has been the antithesis to illustrate a glaring anomaly. Is it right, his friends argue, that a man, holding one of the highest positions as a surgeon in the country, should, by any accident of the wheel of luck, be excluded *de facto* from holding office in the College of Surgeons of this country? Is it not right that the Fellows should at once proceed to exercise the powers which they actually possess, break the fetters of old associations, and elect whom they please, and fresh men every year, into the Council of the College?

Such is the principle, as we understand the case, which the fellows have to decide on the 4th of July next.

PROFESSIONAL INTERCOURSE WITH HOMŒOPATHS.

When much loose professional morality is floating about, and when there are members of the profession who cannot make up their mind as to whether or not they dirt their fingers while playing with pitch, a bit of sound honest truth like the following from the provinces comes like a refreshing shower over our medical urban hotbed. We strongly recommend to the attention of all medical men who are concerned, both to the open consultant with homœopaths and to those who would consult with them under certain conditions, the following letter from the pen of our President, Dr. Radclyffe Hall. It is extracted from the pages of a cotemporary, to whom it was addressed as a remonstrance to certain views concerning homœopathic consultations therein published.

It will be seen that Dr. R. Hall takes precisely the same uncompromising views on this subject, and uses the very same arguments, as those which we have always sustained in the pages of this Journal. He maintains that there need be no kind of special pleading on the subject. We can have nothing to do with homœopaths. We have been more than once asked by correspondents what they are to do when brought into such or such a supposed position with a homœopath; and we now answer them by begging them to study the following lines. They will there find the rule of conduct, such as a man of professional honour is bound on all occasions to follow, plainly enough laid down. We would add, in the words of a facetious moralist, as a sure and safe line for a hesitating doctor to pursue in this matter, that when he feels any kind of doubts as to whether he should or should not consult with a homœopath, "Don't do it".

"*To the Editor of the Medical Times and Gazette.*

"Sir,—May I be allowed to make a comment on a sentence in your last week's Replies to Correspondents? You observe on the question of consultation with homœopaths, after stating that it is 'absurd and impossible'. . . . . 'But there may be doubts how far we are justified in refusing aid to patients in an extremity merely because they *have been* (the italics are mine) adherents of homœopathy.' In this I think the profession at large will agree with me that there never can exist any such doubts for an instant. We are the servants of the public, and have no right to refuse our professional services when called for, on the score of any previous opinions or acts of the patient. This is not the point at issue on any occasion. The existing feeling of disapprobation on the part of the profession towards those among them who attend persons previously treated by homœopaths is restricted entirely to those who do so attend in an equivocal manner, either in consultation or in conjunction with a homœopath, or, at least, at the same time with a homœopath; perhaps even allowing the patient to take on the same day the globules of the one and the doses of the other. *Towards all such the more loyal members of the profession feel indignant, and, in my opinion, justly indignant. For such coquetting with a so-styled system which every disbeliever must hold in contempt, there can only be either a sordid motive or the not unamiable but weak motive of disliking the unpleasantness of hurting the feelings of the homœopath or of the patient's friends. The finer motives of humanity, duty to the patient, etc., are in no way involved.**

"A patient is a free agent. If incapacitated by his sickness from judging for himself, his friends are free agents. He or they ought to know what it is they want. If they choose to call in a regular practitioner after a homœopath has been in attendance, it can only be because they now prefer the services of the former. From feelings of courtesy, they may not wish abruptly to discard the homœopath. It is 'unpleasant' to them to do so. But is there no higher duty incumbent upon us than to 'make things pleasant' to the social feelings of our patient and his friends, when by so doing we appear to the public outside to class ourselves with homœopaths and homœopaths with us? Can any man who feels a pride in his profession doubt that loyalty to his profession is a positive duty which ought to be carried out, even though it entail the exercise of the same firmness of conduct which proper self-respect also entails? Our personal duties are threefold: to our patient, if he desire our services; to ourselves, in maintaining our self-respect; to our profession, in maintaining not only in re-

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[* The italics are ours. Ed. B. M. J.]

ality, but in appearance to the world, its purity and spotlessness from irregular practice. I contend that the three are in every instance compatible.

"When called in to a patient attended by a homœopath, a medical man can always say with sufficient courtesy, 'My services are at your disposal if you desire them, but only on condition that during my period of attendance the homœopathist entirely retires from visiting the patient: we believe nothing in common in medical matters, and therefore cannot in any case act in conjunction with benefit to the patient.' If this be objected to, let the medical man himself decline to attend; or, if already in the house, let him decline to see the patient in the presence of the homœopath, to hold any medical converse with the homœopath, or in any way to recognise him as a brother member of the profession. By thus acting firmly on every occasion, the decision rests, as it should rest, with the patient; and if the patient decides not to forego the attendance of the homœopathist for the time being, the medical man has not to blame himself for withholding his services. Practically, this does not occur. If called in after the homœopath, by proper firmness the medical man can both yield his services and maintain his position and that of his profession at the same time. But we are asked, Are we to let the patient err in his ignorance, when we have a chance of doing him good, etc.? We are not responsible for the acts of others, only for our own. Otherwise, in a case of serious illness, when irregular practitioners are called in because medical men have little hope to give, we should refuse to go away, and insist, against the will of the patient, in continuing our attendance and ministrations. This is merely the converse of the other suggestion; and yet to what exclamations against interfering with the liberty of the subject, etc., would it not give rise! So far as I can see, the rule may be made absolute—*that it is the duty of every medical man to his patient, to himself, and to his profession, that he never consents even to appear to attend a case in conjunction with an irregular practitioner, whether homœopathic or any other.*[*] Let one or other always retire, and let the patient or the patient's friends decide which.

"I am, etc., C. Radclyffe Hall.

"Plymswood House, Torquay, June 8th."

THE WEEK.

The proverb, "*L'homme propose et Dieu dispose,*" has been sadly but truly illustrated in the matter of the election of medical officers to St. George's Hospital, which must take place in consequence of the retirement of Messrs. Cæsar Hawkins and Cutler. Mr. Gray, whose election to one of the vacancies thereby caused would have been certain, is snatched away by death; and Mr. Athol Johnson, whose name has also been put forward, and was a favourite candidate, retires from the scene. Mr. Holmes, therefore, of the three candidates put forward, alone remains; and, consequently, Mr. Henry Lee, surgeon of King's College Hospital, comes forward as candidate for the office of assistant-surgeon to St. George's Hospital. No better proof could be given for the necessity of a change in the terms of the tenure of office by hospital medical men which generally prevails; no better proof could be given of the defects of the unlimited tenure of office system. Mr. Henry Lee is lost to King's College Hospital by the latter, and is gained to St. George's under the system which prescribes a limit to the term of office. His election at St. George's may be considered as certain; for we need hardly say that the governors will be only too glad to secure his valuable services, and the credit which his name must bring to their medical school.

The nomination of Mr. H. Lee and Mr. Holmes took place on Wednesday last, with the unanimous approval of the Board of Governors; and, as a matter of course, their formal election would take place yesterday.

We regret that, in our last number, we omitted to add to the names of the gentlemen who had been reelected medical officers of St. Mary's Hospital, the names of Dr. Tyler Smith, Mr. Toynbee, and Mr. White Cooper.

Want of moral perceptions by corporate bodies is a very common and old fact. We last week noticed its absence in the direction of the Crystal Palace, when referring to what we deem the brutalising exhibition of M. Blondin. The directors, like all moral delinquents, have progressed in their delinquency, and at last so outstripped public decency as to allow the acrobat to risk the life of his child, as well as his own, in his artistic displays; and to call for the interference of Sir Cornewall Lewis. This gentleman stated in the House of Commons:—

> "My attention has been directed to the circumstance referred to, and I am also aware that it is proposed to repeat this exhibition to-morrow at the Crystal Palace. I have, in consequence, caused a letter to be written to the directors of the Crystal Palace, by which I trust that the exposure to danger of a child of tender years may be prevented; and I am in sanguine hopes that the letter which I have written may be efficacious for that object."

We have ventured to touch on this subject, because our readers may remember that the Crystal Palace was strongly patronised, in its beginning, by the medical profession; and on the grounds that it was to be an arena for the development of the rational pleasures, the healthful recreation, and artistic tastes of the people of this country. We cannot doubt for a moment that the whole profession is with us in reprobating the perversion of a great national institution to so degraded a purpose, as that of exciting the morbid appetites and vicious appetites of our human nature. We sincerely trust that Sir C. Lewis's—the country's—remonstrance may have the effect of preventing this beautiful palace of the people from being converted into a *barrière de combats,* or even a Vauxhall.

It is right that our readers should know what is thought of their Journal by our honourable brethren of the medical press. The following opinion is copied from the *Medical Circular*; and we give it admission to our pages, because as every one will at once see, the editor, in giving it, stated what he evidently believed, according to his lights, to be the exact and simple truth:—

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[*] The italics are ours. [Ed. B. M. J.]

> "There is little doubt that the Journal will occupy the attention of the meeting, and it would be as well that the subject were discussed beforehand, so that some definite course might be taken upon it. The Journal is, undoubtedly, altogether unworthy both of the Association and the profession. It neither fulfils the ambition of the best men, nor gratifies the vanity of the least. The thousands of pounds that have been sunk in this literary quagmire afford an example of the stupendous follies that associated bodies will sometimes commit."

No one, we may safely affirm, will accuse the editor, when he makes this statement, of floundering in a moral quagmire!

The election of a successor to Sir Charles Hastings as physician to the Worcester Infirmary, took place on Monday week, when Dr. Alexander M. Inglis was elected without opposition. In proposing Dr. Inglis to the meeting of governors, the Rev. Mr. Pearson took occasion to make a few remarks on the mode of electing the medical officers of hospitals and infirmaries:—

> "He felt that the system at present adopted, the proxy system, was very much to be deprecated and lamented. He wished the governors would take the matter in their hands, and either appoint an election committee or adopt some other system in such matters. A worse system than the present could not in his opinion be adopted. It was a most expensive and burdensome system, and most unfair and troublesome to the candidates. In fact, it involved almost as much trouble and inconvenience as the election of a member of Parliament. Independent of the amount of expense, it involved a great deal of trouble to the candidate, and led to scenes that ought to be avoided. Therefore, he wished most sincerely that some other mode of election might be introduced. He regretted very much that in the new rules to be brought before the governors at their next quarterly meeting, some three weeks hence, there was no better method pointed out with respect to the election of physicians to the institution. There was another method suggested as to the election of the house surgeon, but not as to the physicians. But the evil was so great and crying that he hoped some remedy might in time be introduced."

At the meeting of the Metropolitan Medical Officers of Health, on Saturday last, Mr. Taylor made a communication on the subject of the consumption of smoke in the fire-places of dwelling houses. He pointed out that in the present system of open fire-places, two great evils occurred: the first was the waste of heat, by the fire-place being situated directly under the chimney, and which amounted to 75 per cent. of the heat generated; and second, the production of draughts, by the fire being fed by air from the room. He exhibited an exceedingly simple fire-place, by which these two defects were altogether remedied. The smoke, instead of being allowed to pass into the chimney, was conducted round the outside of the fire-place, to the bottom of the grate, where it was taken into the fire and consumed. The combustion was provided for by air conveyed from without to the back of the fire, which prevented draught, and the whole fire-place was projected into the room, so as to secure the benefit of the whole amount of heat generated. This stove can be seen at work at the new office of the Board of the Works, in New Street, Spring Gardens, and also at the office of the inventor. The contrivance was generally approved on the ground of both comfort and economy. Mr. Knipple introduced a very ingenious method of flushing urinals, water-closets, drains, and sewers. The flushing was secured by the agency of water allowed to accumulate from any source up to a fixed quantity, when, by the aid of float valves, the accumulated water was discharged into the drain or sewer when it was required. This also was regarded as an inexpensive and efficient means of securing the constantly periodical flushing of drains or sewers where filth of any kind had a tendency to accumulate.

At a late meeting of medical men in Edinburgh, anent Lunacy Laws, a brother professional stated, as his opinion, that the reason why prosecutions against medical men in lunacy matters had been so few in Scotland, as compared with what had occurred in England, was the *high character of the medical men* in the former country. Really this is hardly kind, even if it be "justice to England". Dr. Douglas Maclagan, however, very cleverly answered this bold position of our self-satisfied Scotch brother, and suggested that the argument cut two ways; for, if the fact be accepted that the cause of prosecutions of this nature is that the man prosecuted has not a high character, then, suggested Dr. Maclagan with painfully logical effect, all those gentlemen, few though they be, who have had to pass through the prosecuting fire in Scotland are men *not* of high character! "I myself", adds Dr. Maclagan, "very nearly once figured in the category!" We suspect that the gentleman who made this sly hit at our professional brethren in England was venting his spleen upon the Royal College of Physicians of Edinburgh for having gathered so many of them under its wing!

We have had our attention called to a little *brochure* by a member of our own profession, on the subject of the deterioration of iron under certain conditions. The subject was communicated, as we have ascertained, to Professor Cumming of Cambridge, by Dr. Alderson, who sent to him a specimen of the iron, drawing his attention to the nature of the change and the operation of the causes. Professor Cumming published a paper on the subject in the *Cambridge*

Philosophical Transactions for 1825, of which the following is an extract.

Extract of a Letter from James Alderson, Esq., Fellow of Pembroke College, Cambridge, to the Rev. Professor Cumming. (*Read February 21st*, 1825.)

"The accompanying specimen of carburet of iron formerly composed part of a groove in which a patent log was made to slide. It was originally cast iron, and was nailed to the coppered stern-post of the ship *Zoroaster*, of the port of Hull. On the return of the ship from India, after an absence of about nine months, it was found, as it now remains, converted into plumbago, having lost very considerably in weight, but having perfectly retained its original form."

The subject is especially interesting at the present moment; and the little pamphlet now printed for private circulation contains some additional facts on the deterioration of iron. It appears possible, according to the evidence here given, that, under a certain set of circumstances, a destructive change, leading to very disastrous results, might occur at any time to iron-plated vessels. Without due consideration of these facts, followed by adequate inventions to guard against such possible combination of perilous circumstances, no security can be guaranteed to the safety or efficiency of that iron-sided fleet which the nation is now providing for her defence.

The following remarks, written before the death of Cavour, are from the *Moniteur des Sciences, etc.*:—

"We read in the *Turin News*:—'Count Cavour is ill; yesterday he was bled thrice; to-day he is better.' In another despatch on the following day:—'Count Cavour has again fallen ill. He has been bled twice. There is nothing to fear.' If Cavour triumphs over such treatment, he is even stronger in his constitution than he is skilful in diplomacy. At all events neither Austria nor the Pope need complain of the Turin faculty. Treatment of this kind, we are told, which frightens people in Paris, is quite common in Turin. You every day meet with people there who have been bled 150 times. Many doctors there—*farceurs de médecins de Turin!*—assert that the exceptional climate of Turin renders this remedy indispensable. Moreover, during the past two months we have had, they say, an intolerable heat, which has enervated everyone; and the *savans* assert that recent earthquakes which have done so much damage in Italy result from this heat. Why, the *savans* are greater *farceurs* than the doctors! We ought to have them in Paris to enliven our Academy. And even the correspondent who tells us all this is a *farceur*—a *savant* and a dialectician! He tells us of three successive—not simultaneous—bleedings, and then makes the bleeding depend upon the heat! Again, because bleeding is common at Turin, and because people have been bled 150 times, Cavour must be bled twice in a day!"

M. Reveil has called the attention of the French Academy of Sciences to the subject of cosmetics in reference to hygiene. The evil is, he says, enormous. In an authority on these matters, the *Perfumer's Manual*, M. Reveil has found sixty-five formulæ which contain poisons. There is no article of the toilette which can be used with safety. Soaps are coloured with most injurious matters; tinctures for the hair contain salts of lead and silver; cyanide of potassium is present in one of the articles; and a "milk for the toilette", which has great renown through advertisements, contains large quantities of corrosive sublimate. The vendors of all these articles are subject to legal penalties. M. Reveil concluded with the following words, which, we venture to think, are well worthy of the serious consideration of some of our professional brethren in this country. "We cannot conclude without remarking that it is a sad and painful thing to witness how many medical men there are who, throwing aside all dignity, support with their name and authority pretended discoveries, and recommend through their names preparations which are actually dangerous. We would also call the attention of authority to certain societies which give medals to whoever asks and pays for them."—The Romans, who were masters in matters of hydrology, preserved their drinking water pure and fresh, and free from all vegetable matters, simply by excluding the light from it—so, at least, says M. Coste. Vegetation in water is not seen under bridges.—Medical men in Paris exclaim against the rise of house-rents. Twenty years ago, we are told, the medical men who paid more than £80 a year in rent were the exceptions; but now their average rentals are above £80, and their average incomes not more than £240 per annum. "When the average income of doctors is only £240, and the average of this single article of expenditure reaches to about £100, how can they do otherwise than grow thin?"—A Spanish labourer, who had long suffered from ophthalmia in spite of all treatment, was accidentally stung by a bee on the eyebrow. Thereupon followed swelling, etc.; and in a few days, arrestment of purulent secretion, and cessation of photophobia. He therefore, three days afterwards, subjected his right eyebrow to a similar sting, which produced a like therapeutic effect—so says *Siglo Médico*.—*Apropos* of *post mortem* hysterotomy, Dr. Péricr tells the following incident. Fifteen years ago, when practising in a county town, he was sent for by express to a neighbouring village by an *officier de santé*. The *officier* had been directed by M. le Curé to perform the Cæsarean section on a girl who had just died; but, not feeling justified by law, he declined, and sent for the doctor. "I found mother and child both fairly dead; but the Curé, who was a bit of a doctor, asserted that the child might be revived, although the mother was dead. As he threatened, if I refused, to have the operation performed by a non-medical, I operated, and produced a dead child. The rustics, however, considered that the Curé was over zealous, and threatened us with bad treatment." Whereupon the doctor and *officier de santé* escaped by the back door. The Curé managed to pacify his parishioners, and buried both the bodies. Then arose reports of poisoning. Both bodies were exhumed by the mayor's orders; and, says Dr. Périer, "I was cited to attend, and was accused by the mayor of having spoilt his work. The Curé, however, who was well up in *embryologie sacrée,* stuck to his text. We had a *post mortem* examination; nothing was found, and the bodies reburied. Such were my tribulations relative to hysterotomy!"—M. Aran asserts, on the strength of his clinical experience, that pleurisy of the right side is, in ninety-five cases out of a hundred, of a secondary character, depending upon pulmonary tubercles; whilst, on the other hand, pleurisy of the left side is generally primitive, follows a regular course, and gets well spontaneously.—The green, red, yellow, and white colouring matters of children's toys are frequently formed as follows: the green of Scheele's green; the red of minium; the white of lime and carbonate of lead; and the yellow of chromate of lead.—M. Grave tells us that he has discovered a new virtue in chloroform—viz., a power of modifying the flavour of various articles. He finds, for example, that chloroform, when mixed in certain proportions with tincture of aloes or of gentian, and with sulphate of quinine in water, completely takes away their bitter taste.—M. Piorry, famed for plessimetry and nomenclature, has during the past year made use of the following terms to express the following compound ideas, plessimetrical, of sound and sensation: Sclerotic, of hardness; malassic, of softness; hydric, of fluidity; aeric, of the gaseous; hydraeric, of the gaseous and the fluid; pallic, of the vibratile; elastic, of elasticity. The degree of these sounds he represents by hyper- and hypo-; the combination of them is represented by their union; etc.—The following are the names of the authors whose works have been adopted by the French Minister of War as best suited to the purposes of the military surgeon: MM. Sappey, *Anatomy;* Béclard, *Physiology;* Malagutti, *Chemistry;* Garnot, *Physics;* Moquin-Tandon, *Medical Botany and Zoology;* Morel and Willemin, *Histology;* Nélaton, *Surgery;* Grisolle, *Medicine;* Chomel, *General Pathology;* Sédillot, *Operative Surgery;* Cazeaux, *Midwifery;* Bouchardat, *Materia Medica;* Michel Lévy, *Hygiene;* Briand, *Medical Jurisprudence.*—Calculous affections are very common in Persia. Dr. Pollak ascribes the fact to the general use of milk, and particularly of sour milk, of acid fruits, and wine. Dr. Pollak, in the course of eight years, has operated 158 times in Persia. His operations were always performed in the open air, and under chloroform. His cures were 144, and deaths 7.—M. Felix Hatin, the author of a memoir on the Cæsarean operation which lately provoked a very warm discussion in the French Academy, died a short time ago.—The Italian journals lament the death of M. Alessandrini, Professor of Comparative Anatomy in the University of Bologna, where he had formed a superb museum. His loss is deplored as a citizen as well as a savant.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

President—C. Radclyffe Hall, M.D., F.R.C.P.L. and E., Torquay.
President-elect—Alfred Lochée, M.D., F.R.C.P.Lond., Canterbury.

The Meetings of the Association will take place at St. George's Hall.

Tuesday, *July 23rd.*

1 p.m. Meeting of Committee of Council in the Reading Rooms, St. George's Hall.

2.30 p.m. Meeting of the General Council of the Association at the Reading Rooms, St. George's Hall.

7 p.m. First General Meeting of the Association at St. George's Hall. The retiring President will make a few remarks. The new President will deliver an Address. The Report of Council will be presented, and other business transacted.

Wednesday, *July 24th.*

8.30 a.m. Public Breakfast at the Corn Exchange.

10 a.m. Meeting of the Members of the new Council.

11 a.m. Second General Meeting of Members. The Address in Medicine will be delivered by W. O. Markham, M.D., of London. Papers and Cases will be read. The Meeting will adjourn at One, and reassemble at Two p.m., when the Report of the Benevolent Fund will be read.

8 p.m. *Soirée.* By the kind invitation of the Very Rev. the Dean of Canterbury, this Meeting will take place at the Deanery.

Thursday, *July 25th.*

11 a.m. Third General Meeting of Members. The Address in Surgery will be delivered by George Hoffmann, Esq., of Margate. Papers and Cases will be read.

6 p.m. Dinner at the Corn Exchange. Tickets One Guinea each.

Gentlemen intending to be present at the Dinner, are requested to send notice, as early as possible, to Robert Tassell, Esq., St. Margaret's Street, Canterbury.

Members are requested to enter, on arrival, their names and addresses in the Reception Room, St. George's Hall; where cards will be supplied which will secure admission to all the Proceedings, and contain such information as may be useful to those who are strangers to the city.

Members who wish for previous information may communicate with Robert Tassell, Esq., St. Margaret's, Canterbury.

It is particularly requested that all Members who propose to read Papers, will communicate with the General Secretary without delay. Papers are promised by Spencer Wells, Esq.: P. C. Price, Esq.,; William Martin, Esq.; George Rigden, Esq.; Dr. B. W. Richardson; and Edward Lund, Esq.

Among the principal Hotels, are—the Fountain; the Rose; the Fleur-de-Lys; and the Freemasons'.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 15th, 1861.

BRITISH MEDICAL ASSOCIATION.

[*June 22nd*, 1861.]

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Thompson, J. Esq. Surgeon to the Dispensary, Ripon
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Trousdale, W. Maw, Esq. West Butterwick, Bawtry
Tutin, S. Esq. Surgeon to the Dispensary, Ripon
Ward, John, Esq. Penistone
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Weddell, Thomas, Esq. Surgeon to the Sea-Bathing Infirmary, Scarborough
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Wightman, J. Esq. York
Wilkinson, Henry, Esq. Surgeon to the Dispensary, Rotherham
Williams, Caleb, M.D. York
Wilson, Wm. Murray, Esq. Horsforth, Leeds
Wood, Arthur, Esq. Kirby Moorside, nr. York
Wood, Richard, M.D. Driffield
Wood, William, M.D. Surgeon to the House of Correction, Wakefield

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Prichard, H. L. Esq. Tir Caradoc, Taibach
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Shropshire Scientific.

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Davies, William A. Esq. Llanidloes
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Edwards, Thomas, Esq. Llansaintffraid
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De Lisle, De Beauvoir, M.D. Guernsey
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Bell, J. M.D. Professor of Botany in Anderson's University, Glasgow
Macleod, G. H. B. M.D. Lecturer on Military Surgery in Anderson's University, Glasgow
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Lund, George, M.D. Madeira
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Nicholson, Hon. T. M.D. Antigua, W. Indies
Sammut, Joseph Balthazar, M.D. Malta
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Thring, R. S. O. M.D. Bengal Medical Service, Roorkie

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Newnham, William, Esq. Tunbridge Wells
Traill, T. Stewart, M.D. Professor of Medical Jurisprudence in the Univer. of Edinburgh

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
South Midland. [Annual.]	General Infirmary, Northampton.	Thursday, June 27th, 1.30 p.m.
East Anglian. [Annual.]	Norfolk and Norwich Hospital.	Friday, June 28th, 2 p.m.
Metropol. Counties. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 2nd, 3 p.m.

Correspondence.

IMAGINARY SPERMATORRHŒA.

[The following letter has been sent to us at this time in consequence of the publication, last week, in the *Lancet*, of a Clinical lecture by Dr. Chambers on "Imaginary Spermatorrhœa," in which are related the details of a fatal case that had been in the hands of a Mr. Dawson, of Finsbury Circus. In the following instance the patient has received a thorough medical education, and is therefore well qualified to give his opinion as to his freedom from disease of the urinary organs before the treatment was commenced. At his request we withhold, for the present, his name, and a few additional circumstances mentioned in the letter, but he is quite prepared to justify his statements, which scarce require a comment.]

Sir,—......I take the liberty of sending you a few particulars of my own experience of Dawson.

I was so unfortunate as to fall into his hands in October 1851. For a considerable time before that date, I had suffered from phimosis. A great quantity of filth had been allowed to accumulate under the foreskin, causing great irritation. Emissions occurred at long intervals. Up to the date mentioned, I had not commenced the study of medicine. In October 1851 I was in London, about to commence my medical studies, and having stumbled upon his book, I went to consult him. He made scarcely any inquiries, but got a bit of glass, pretended to squeeze something upon it out of the urethra, put it under a large microscope, and immediately pronounced that I was "suffering a good deal from spermatorrhœa." I told him I was going to Edinburgh shortly for purposes of study. He said he could do nothing unless I stayed in London three weeks or a month, and that it would be time enough to go then. He also stipulated that a guinea was to be paid every time he passed an instrument. During that month of October an instrument was passed (as I find from memoranda of fees paid) twelve times. Ointment, composed principally, as Dawson said, of chloride of zinc, was applied to the urethral surface by means of this instrument, and I believe some of it was squirted into the bladder. These applications produced pain and bloody urine. In November I left for Edinburgh. I allowed him to practise this treatment upon me at various times afterwards, up to June 1855. Not to be tedious, suffice it to say, that the instrument, with the ointment, was applied, first and last, twenty-eight times. On two of these occasions nitrate of silver was substituted for the ointment. Up to the very last, Dawson always took fees from me, although he knew perfectly well that I was a medical student.

Soon after the last application (in 1855), I had a severe attack of swelled testicle. The sexual organs are smaller since this affair of the swelled testicle, and I have suffered in various ways ever since. My life has been frequently rendered miserable for months at a time by very severe neuralgia affecting the whole of the right side, the loin, groin, hip, thigh, popliteal space, the leg, and even extending into the foot. I am obliged yet to wear a well fitted suspensory bandage; and I believe I shall wear it all my life. I am liable, after the slightest extra walking, to violent attacks of urethritis. On these occasions the urethra pours out pus in extraordinary quantity. From the dropping, there is, no doubt, some stricture; but I am shy about exploring the passage. *I am certain that when I first went to Dawson there was nothing the matter, but what cleanliness, an astringent lotion to the surface of the glands, and a few days, would have set right.* I never practised masturbation; I never had any venereal disease; nor did anything, except the above-mentioned treatment, ever happen to me calculated to injure my sexual system. I have always lived temperately, and have originally had a good constitution...........

Withholding my name from actual publication for the present, you are at liberty to make any use you please of this letter. I am, etc.,

M.D.Univ.Edin., M.R.C.S., L.S.A.

THE COMING ELECTION AT THE COLLEGE OF SURGEONS.

Sir,—An attempt will, it appears, be made at the ensuing election of members of Council of the College of Surgeons to break through the custom which has hitherto prevailed, of re-electing the members going out by rotation. Three gentlemen are proposed, in addition to the three whose turn of office is about to expire, and who desire to have it renewed. The three new names are those of Mr. John Adams, Surgeon to the London Hospital; Mr. Paget, of Leicester; and Mr. Fergusson, of King's College. Now, sir, if a precedent is to be set aside, it is desirable that the Fellows of the College should fairly understand what they are doing. The first-named two gentlemen are next in rotation of seniority as members of the College; and their names would, under the usage which has been heretofore pursued, stand next in order as candidates for the Council when vacancies occurred.* They are unimpeachable names. It may be a question whether Mr. Paget can attend properly to the duties of the College while he is still practising at Leicester?

In the case of the nomination of Mr. Fergusson, however, there is a still further departure from precedent. Mr. Fergusson is a junior member of the College as compared with many who are eligible for the Council. Is there any strong reason why he should be put forward? Are there any reasons why the Fellows should not confer an unusual distinction on him? There has been a great deal of oblique hinting at some person—a surgeon, eminent in the profession—who has been giving direct and indirect support to homœopathy. In a letter in the Journal of this day, it is hinted that such an one is a candidate for a seat in the Council of the College of Surgeons. Many years ago this gentleman's conduct, in going down to the country to consult with a homœopath, was strongly reprobated; and at the present moment it is a matter of frequent comment amongst London practitioners that he continues openly and constantly to do so. If these things are so, for the sake of all that is honest, let them be spoken out; and let the Fellows deal with them with their eyes open. If they are not, let them be denied; that we may be relieved from the stigma which attaches to the belief, that one in the largest practice, and who has by his manual skill placed himself forward in the estimation of the public, is daily compromising the dignity of the profession by the support of quackery. Then the question would remain, On what grounds should Mr. Fergusson be elected before many men who are quite as fit as himself to have a seat at the Council-Board of the College of Surgeons? I am, etc., F. R. C. S.

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* Our correspondent makes a slight mistake on this point. Mr. Adams is next in rotation, his membership dating 1828; but Mr. Paget's membership dates 1818. Editor.

June 14th, 1861.

MR. PAGET A CANDIDATE FOR THE COUNCIL OF THE COLLEGE OF SURGEONS.

Letter from Edwin Morris, M.D.

Sir,—I am exceedingly gratified to find that Mr. Paget of Leicester has been nominated for a seat in the Council of the College of Surgeons. He is one of the ablest and most talented associates we have; and I do hope that every member of the Association, being a fellow of the College, will be present at the election on the 4th of July, to support the *first* provincial candidate. It has long been a matter of surprise and regret to me that advantage has not been taken before of availing ourselves of the privilege the charter of 1843 gave us. The meaningless routine of re-electing the retiring members of the Council cannot be otherwise than most detrimental to the interest of the College. The great body of the fellows consist of provincial men, and we require a provincial man to represent us. The nominators of Mr. Paget have been most fortunate in their selection. His long standing in the profession; his well-known advocacy of the rights, dignity, and interests of the medical profession; his power of debate, together with high classical attainments,—point him out as a most desirable candidate, and one that will do honour to the country fellows, in being their first representative at the Council of the Royal College of Surgeons.

Of Mr. Fergusson's claims as a candidate I shall forbear to speak. His election I look upon as certain, and it will be a well-merited compliment to that gentleman. I do consider that the London fellows ought not to have it all their own way, and that we should have one country fellow with a seat in the Council; and I shall be very much mistaken and exceedingly sorry if, on the 4th of July, Mr. Paget is not by a large majority placed in that honourable position. I am, etc.,

Edwin Morris, M.D.,
And Fellow (*by Exam.*) *of the Royal College of Surgeons, London.*

Spalding, June 1861.

MR. PAGET AND THE COLLEGE FELLOWSHIP.

Sir,—I have just received the printed form respecting the election of three Councillors for the College of Surgeons; and Mr. Paget of Leicester is eligible, and is proposed. As he is one of our old and most distinguished associates, would it not be suitable to urge upon our members the importance of electing him? We of the provinces are entirely unrepresented in the College, and no one stands higher than Mr. Paget does.

I write this in the hope that you will support Mr. Paget's cause by an article on the subject of our unrepresented state.

I have not the pleasure of a personal acquaintance with Mr. Paget. I am, etc., F.R.C.S.

INTESTINAL OBSTRUCTION.

Letter from John Gay, Esq.

Sir,—I am unwilling to trespass further upon the pages of your valuable Journal than to say, in reply to Mr. Hinton's last letter, that whilst I do not presume to believe that I shall ever be able to throw any great amount of light on the subject of internal obstruction, I feel assured that by accumulating *fresh* and *precise* information on that important subject, and submitting it to keen analysis, others, more able, will arrive at more satisfactory generalisations than any that have hitherto been reached.

I feel that Mr. Hinton is animated with the same desire as myself; and that, if he continue in the path of observation and induction upon which he entered long before I did, he must succeed in discovering gradually more and more subtle grounds of distinction between the various forms of that Protean malady, and thus enable the surgeon to enter upon the exploration of the abdominal cavity in cases of severe obstruction with more assurance and greater chance of success than he is at present able to command. I am, etc.,

John Gay.

18, Finsbury Place South, June 15th, 1861.

Medical News.

University of Oxford. Degree conferred in a Convocation holden on Thursday, June 13th:—

Doctor of Medicine (*comitatis causâ*).

White, Arthur David, Pembroke College, Cambridge

University of Cambridge. Degrees conferred in a Convocation holden on Thursday, June 13th:—

Bachelors of Medicine.

Andrew, W. W., Caius College
Partridge, T. B., St. John's College

Degrees conferred at a Congregation on Saturday, June 15th:—

Bachelor of Medicine.

McKenzie, John Ingieby, Caius College

Apothecaries' Hall. On June 13th, the following licentiates were admitted:—

Armstrong, S., Woodbridge, Suffolk
Cooper. H., Bristol Royal Infirmary
Davy, H.. Penzance
Harling, H., Fletching, Sussex
Hatchett, J., Ravenstone, Leicestershire
Holman, H., Crediton
Lidderdale, J., Osminton, Weymouth
Woodforde, A.

APPOINTMENTS.

Inglis, Alexander M., M.D., elected Physician to the Worcester Infirmary, in the room of Sir Charles Hastings, M.D., resigned.

Royal Army. The following appointments have been made:—

Lumsden, Staff-Assistant-Surgeon C. G., to be Assistant-Surgeon 8th Light Dragoons, *vice* R. R. Scott.
McDermott, Staff-Surgeon P. A., to be Surgeon 2nd West India Regiment.
Quinlan, Staff-Assistant-Surgeon T., to be Assistant-Surgeon 33rd Foot, *vice* Spry.

To be Staff-Assistant-Surgeons:—

Biddle, Assistant-Surgeon T. J., 8th Foot, *vice* Quinlan.
Scott, Assistant-Surgeon R. R., 8th Light Dragoons.
Spry, Assistant-Surgeon G. F., 33rd Foot, *vice* Land.

Volunteer Corps. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

Briscoe, J., Esq., to be Assistant-Surgeon Oxford Militia.
Dalton, P. H., Esq., to be Assistant-Surgeon 19th Middlesex R.V.
Harrison, W., M.D., to be Surgeon 2nd Administrative Battalion West Riding R.V.
Webb, W. W., M.D., to be Assistant-Surgeon 17th Suffolk R.V.

To be Honorary Assistant-Surgeons:—

Cross, R., M.D., 3rd North Riding A.V.
Harper, J. W., Esq , 6th Suffolk R.V.
Shorten, C., Esq., 11th Suffolk R.V.
Young, F. A., Esq., 38th Kent R.V.

BIRTH.

Crisp. On June 8th, at Lacock, Wilts, the wife of *J. H Crisp, Esq., of a son.

DEATHS.

*Bryden, Wm. A., M.D., at Mayfield, Sussex, aged 44, on June 8.
Turner. On June 16th, Anna Mary, wife of *Thomas Turner, Esq., Surgeon, Manchester.

University College, London. At a special session of the council, held on Saturday last, the Atkinson Morley Surgical scholarship, £45 per annum, tenable for three years, was awarded to Mr. Henry Charlton Bastian, of Falmouth.

Royal College of Physicians. On Saturday last, the London College of Physicians gave a very successful dinner at the college. Amongst the numerous guests were the Archbishop of York, Bishop of Bath and Wells, Lord Stanley, Sir Cornewell Lewis, the Attorney General, and numerous other illustrations of the Bar, the Pulpit, and the Legislature.

The Brunel and Stephenson Statues. At a meeting of the committee, on Friday, it was determined that the statues to the memory of these eminent engineers shall be placed in propinquity to the statue of Pitt in the gardens of St. Margaret's, Westminster, facing the House of Commons, in Old Palace Yard. They are to be executed in bronze by Baron Marochetti.

University of Cambridge. The portions of the classical authors selected by the Board of Medical Studies for examination in the ensuing Academical year are:—*Hippocrates.*—The 5th, 6th, 7th, and 8th sections of the Aphorisms. *Aretæus.*—"On the Causes and Symptoms of Acute Diseases." The 6th, 7th, 8th 9th, and 10th chapters of the second Book. *Celsus.*—The 3rd and 4th Books.

Accidental Poisoning. On Sunday last, between 9 and 10 o'clock, the wife of the Dean of Worcester, who has been for some time an invalid, took by mistake a copious dose of laudanum in place of some other medicine, which she supposed a bottle standing in her sick room to contain. The unfortunate lady has since remained in a state of syncope, with a few partially rallying moments.

Unlucky Roman Doctors. In pursuance of a police search into the private affairs of the professors and pupils of the Hospital of Santo Spirito, the following things have been brought to light, viz.:—A percussion pistol (used for experiments), several score letters (chiefly invitations to dinner), a portrait of Victor Emmanuel (very indifferent), and two gold shirt buttons with the effigy of the same sovereign. In consequence of these discoveries the Doctors Sforza, Crescini, Trace, Marchetti, and Mancini have been exiled.

Death of Mr. George Bishop, F.R.S. This zealous devotee of astronomical science expired on June 14th, at his residence, South Villa, Regent's-park, having nearly completed his 77th year. Mr. Bishop successively filled the offices of Secretary and Treasurer of the Royal Astronomical Society, and was elected President of that body in 1857. His observatory, which he maintained in activity for nearly a quarter of a century, has contributed, in addition to incidental work, an extensive catalogue of double stars, eleven new planets, two comets, and upwards of twenty-five variable stars to our list, besides a remarkable star which suddenly became visible in 1848, the only one of its nature which has been seen since the year 1670.

New French Ambulance. This ambulance is an omnibus-shaped vehicle, to be drawn by two or more horses; weighing some twelve hundred pounds, but constructed in such a manner that it may be easily detached, separated in several pieces in the interior, the most important portion easily carried by several men. The interior is, when fully standing, a row of beds, carrying six or eight men with great ease, but when crowded, may be forced to transport three times that number. Each bed is a "field-stretcher," or portable cot, which takes the wounded man from the field, and without any fatiguing change, places him in this portable hospital. An india-rubber bath is also attached.

TESTIMONIAL TO SIR CHARLES HASTINGS.

On Saturday week last an influential meeting was held at Worcester to promote subscriptions for a testimonial to Sir Charles Hastings, on the occasion of his resigning the appointment of physician to the Worcester Infirmary, and in consideration of the services he has for many years rendered to the county, not only with reference to the above institution, but also to many other works of public utility. The meeting was attended by both the city members, O. Ricardo and R. Padmore, Esqrs.; Sir E. A. H. Lechmere, Bart.; and numerous other gentlemen of the town and county.

The following resolutions, with others which appear in our advertising columns, were carried:—

"That, in the opinion of this meeting, the retirement of Sir Charles Hastings from the office of honorary physician to the Worcester Infirmary, with which institution he has been connected for a period of nearly fifty years, presents a suitable opportunity of evincing in an adequate manner the high estimation which the public entertain, not only for his indefatigable and successful exertions to promote the interests of that charity, but also to disseminate throughout this city and county a taste for science and knowledge, and to elevate the character of the profession of which he is himself a distinguished member."

"That the eminent services of Sir Charles Hastings throughout his long career merit a public recognition beyond the boundary of his immediate locality, from all who appreciate the practical advantage resulting from the successful application of medical science and the beneficial influence of philanthropic example."

The speakers all spoke in the highest terms of the good deeds of Sir Charles Hastings.

The Rev. J. Pearson said he had heard a great many persons express their regret at Sir Charles Hastings's retirement from the situation which he had held so long, and with such very great ability. At the same time, he had heard but one expression of entire concurrence so far as related to the great prudence and judgment shown by Sir Charles Hastings in retiring from the situation while his mental faculties and bodily powers were altogether unimpaired. As was well known, many persons continued in situations long after they were adequate to discharge the duties; but Sir Charles Hastings might have hoped for a number of years to be quite capable of performing adequately and ably the duties of the situation he had now vacated. He thought, and, indeed, it was the general opinion, that Sir Charles Hastings had resigned his situation from most worthy motives, and in a most worthy manner, and he had shown great discretion in giving way to younger men. He had now retired after a period of nearly fifty years connection with the institution. Having referred in complimentary terms to the measures taken by Sir Charles Hastings to establish the Provincial Medical and Surgical Association, and his continued endeavours to support the medical profession, Mr. Pearson said that whether they looked upon Sir Charles as having been connected with the infirmary nearly fifty years, and having worked his utmost to promote its success, whether they regarded him as the founder of the Natural History Society and its museum, and as the promoter of natural science generally in that district, or whether they looked upon him with reference to his social character and virtues, in either way he was very greatly to be admired. Sir Charles Hastings was a man of the most undeviating perseverance and of the greatest possible energy, true and faithful to his friends and to his party, even when, perhaps, sometimes they were in error, which was often considered a great virtue. Whether considered socially, intellectually, or professionally, he was worthy of their most sincere and high regard; and he (Mr. Pearson) was, therefore, certain the meeting would wish to do him all honour.

Mr. Carden said it was a great pleasure to him to see so many working medical men present, because he believed, however much the general public were indebted to Sir Charles Hastings, still it was the estimation in which a man was held by those working in the same profession that was, perhaps, after all, the true criterion of his absolute merit. Sir Charles Hastings first entered the infirmary as house-surgeon forty-nine years ago; he was then quite a young man, he (Mr. Carden) believed only about eighteen years of age, and was only just out of his time to those with whom he had served his apprenticeship. After discharging his duty in the infirmary, Sir Charles left it to graduate, and in 1819 he was appointed physician. He first entered the infirmary in 1812 as house-surgeon; it was in 1819 that he was appointed physician. The first trace they had of Sir Charles Hastings in the infirmary was his asking the governors to do something in the way of building; and in 1823 the new north-west portion of the infirmary was erected. The next addition to the building was in 1826, when they turned their attic wards into more convenient wards, and so the infirmary had gone on improving from time to time ever since; and by Sir Charles Hastings's patient efforts and perseverance a better classification of the patients had been obtained. Sir Charles Hastings had persevered in the most unrebukeable manner. In nothing that he took in his head could he be stopped; where he believed the thing to be right, he ceased not his efforts till it was accomplished. That had led very frequently to considerable discussion, and now and then even to very warm discussion. Sir Charles Hastings had, he believed, been blamed for driving the coach too fast; but to what an extent that coach had been enlarged and improved. He (Mr. Carden) must say that Sir Charles Hastings had pushed the governors rather hard on many occasions, and the effect was now evident both in the north wing, of which he had spoken, and the west wing, which, in 1845, was added, in consequence of a memorial headed by Sir Charles, besides a great number of other very essential improvements that had taken place in consequence of Sir Charles's great energy and perseverance. Another thing, also very pleasing in connection with those improvements, was that the funds of the institution had not fallen off. When the infirmary was first opened, the capital amounted only to £4000 or £5000, but now the funded property amounted to £35,000; and, in proportion as the wants of the institution were felt by the county, money was never found wanting, and he believed never would be. Sir Charles had not been long physician to the infirmary, when he saw that the great want among the provincial medical men was that of union, of entire communication, and of a press through which they might put before the public the result of their very extended experience. In 1828, Sir Charles, and one or two gentlemen who took the same view with him, published the *Midland Medical and Surgical Reporter*. For four years that journal continued, and excited considerable attention; but in 1832, the Provincial Medical and Surgical Association was founded, and on July 19th, 1832, about twenty-nine years ago, the first meeting was held in the Board-room of the Worcester Infirmary. On that occasion Sir C. Hastings addressed a meeting of about fifty members of the profession under the presidency of Dr. Edward Johnstone, brother to Dr. James Johnstone, formerly one of the physicians to the infirmary. He (Mr. Carden) read the opening sentences of Sir Charles Hastings's address on that occasion, as they appeared so characteristic of the man, and somewhat prophetic of the state of the medical profession. Certainly, the prophecy, the aspirations of Sir Charles Hastings and those who met him on that occasion, had been fully verified. Instead of there being disunion amongst members of the profession—instead of medical men in their separate walks of life being the centre of small circles, they were now able, not only to reap the advantage of each other's experience, but to meet each other personally, and enjoy a mutual friendship. They had been listened to throughout the whole length and breadth of the land, and that which was but a meeting of fifty men, representing some one hundred and fifty others of the profession, had expanded, until the Provincial Medical and Surgical Association had become the British Medical Association, with its seventeen local branches, and 2000 members. They had made their voices heard throughout the length and breadth of the land, in a way that they deserved, and all that had been accomplished through the untiring efforts of Sir Charles Hastings. It was to him who had denied himself rest when he required it, who had been at all times unmindful of his ease and comfort in order to raise the medical men, to unite them, and to make them what they were always intended, and were calculated to be, a credit to their profession, and a credit to their country—it was to Sir Charles Hastings that all honour and esteem for so doing was to be given. He (Mr. Carden) would not detain them longer than to say that the cause of that meeting had been to them—he spoke now of the members of the medical profession—a source of the deepest possible regret. It was quite impossible to look upon the departure of Sir Charles Hastings from his most active field of labour without the deepest feelings of regret, which he (Mr. Carden) confessed he felt as much, perhaps more, than any one present. But he thought Sir Charles Hastings was actuated in that, as in every action of his life, by the best possible motives, and a desire to do the best he could for the institution, whose welfare he had so long had at heart.

East India Army Medical Branch. In the House of Commons, on June 13, Mr. Blake asked the Secretary of State for India if he had any objection to state what arrangements had been made with regard to the position of the medical officers of the late East India Company's army on its amalgamation with the Queen's forces; whether it was intended that medical officers who received an increase of rank by the warrant of January, 1860, similar to that granted to officers of the Queen's army by the warrant of October, 1858, should also receive the same increase of pay in proportion as was then granted to medical officers in the Royal army; and were the senior medical officers of her Majesty's Indian service to be promoted to the rank of principal inspector general, inspector general of hospitals, and deputy inspectors general of hospitals, as heretofore, when vacancies occurred; or were those appointments in future to be filled by the medical officers of her Majesty's Royal army.—Sir C. Wood said that the whole question of the army medical staff was under the consideration of the government, and he could not answer the question of the hon. gentleman until some decision should have been come to upon that subject.

Royal College of Surgeons of England. The following are the names of the eligible Fellows who are candidates for seats in the Council of this College at the ensuing election on Thursday, the 4th of July next, at two o'clock in the afternoon:—1. John Bishop, Bernard Street; 2. Gilbert Wakefield Mackmurdo, New Broad Street; 3. Samuel Solly, St. Helen's Place; these three gentlemen retire from the Council in rotation; 4. Thomas Paget, Leicester—nominated by Thomas Macaulay, Thomas Warburton Benfield, Charles Hayes Marriott, Henry Terry, James Mash, and William Wright; 5. John Adams, St. Helen's Place—nominated by William Sankey, Frederick George Reed, Charles Maynard Frost, George Critchett, Nathaniel Ward, Peter Yeames Gowland; 6. William Fergusson, George Street, Hanover Square—nominated by John Erichsen, James Ranald Martin, George Beaman, Henry Haynes Walton, William Adams, and Henry Smith.

WHAT CIGARS ARE MADE OF. A cigar manufacturer, prosecuted for the unlawful fabrication of cheap "Havannahs," on which no duty was paid, escaped the penalty on proving that he never used any tobacco-leaf at all. In addition to the cabbage and the lettuce, rhubarb, dock, burdock, endive, colt's-foot, beech, plantain, oak, and elm leaves, peat earth, sawdust, malt commings, lime, alum, lamp black, sugar, meal of wheat, barley, oats, beans, and peas, chicory leaves steeped in tar oil, potato starch, saltpetre, fullers' earth, salt, gum, treacle, chromate of lead, red dye and black dye composed of vegetable red, iron, and liquorice, have been found in the tobacco of the shops. (*History of Tobacco*, by F. W. Fairholt.)

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......Royal Free, 2 P.M.—Metropolitan Free, 2 P.M.

TUESDAY. .... Guy's, 1½ P.M.—Westminster, 2 P.M.

WEDNESDAY... St. Mary's, 1 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—Royal Orthopædic, 2 P.M.

THURSDAY.....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—London, 1·30 P.M.—Great Northern, 2 P.M.—London Surgical Home, 2 P.M.

FRIDAY....... Westminster Ophthalmic, 1·30 P.M.

SATURDAY..... St. Thomas's, 1 P.M.—St. Bartholomew's, 1·30 P.M.—King's College, 1·30 P.M.—Charing Cross, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY. Royal College of Surgeons, 4 P.M.: Mr. Hilton, "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."—Royal Medical and Chirurgical, 8.30 P.M.: Dr. Down, "Case of Imperfection of Corpus Callosum and Fornix, and absence of Septum Lucidum and Commissura Mollis"; Mr. H. Lee, "On Syphilitic Inoculation"; Mr. Sibley, "On Fibrinous Obstructions of Arteries."—Zoological.

WEDNESDAY. Society of Arts (Anniversary).—Royal Society of Literature.

THURSDAY. Royal College of Surgeons, 4 P.M.: Mr. Hilton, "On the Influence of Rest in the Treatment of Surgical Diseases and Accidents."

POPULATION STATISTICS AND METEOROLOGY OF LONDON—JUNE 15, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys ..1017 Girls.. 926	1943	1121
Average of corresponding weeks 1851-60		1544	1099

Barometer:

Highest (Th.) 30.034; lowest (Sun.) 29.563; mean 29.859

Thermometer:

Highest in sun—extremes (Sat.) 132 degs.; (Sun.) 61.5 degs.

In shade—highest (Sat.) 80.8 degrees; lowest (Sun.) 42.9 degs.

Mean—60.5 degrees; difference from mean of 43 yrs.+2.2 degs.

Range—during week, 37.9 degrees; mean daily, 21.4 degrees.

Mean humidity of air (*saturation*=100), 81.

Mean direction of wind, N.E. and S.W.—Rain in inches, 0.48.

TO CORRESPONDENTS.

*** *All letters and communications for the* JOURNAL, *to be addressed to the* EDITOR, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE have been unavoidably compelled this week to delay publishing the reports of several societies, and also the letters of several correspondents.

W. O.—Will you allow me to inquire, through your pages, what "Faradization" is, and whether it may be performed by an ordinary galvanic apparatus?

A SUBSCRIBER.—The boards for binding the JOURNAL of 1860 can be obtained at the office.

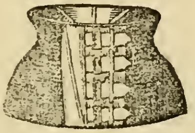
COMMUNICATIONS have been received from:—Dr. MCWILLIAM; Mr. TURNER; Mr. A. SQUIRE; Dr. WM. OGLE; Dr. MORRIS; Mr. H. C. SIBSON; Dr. WM. HINDS; Dr. GRAILY HEWITT; Mr. J. H. CRISP; Dr. TAYLOR; Mr. HENRY THOMPSON; Mr. A. PRICHARD; and Mr. STONE.

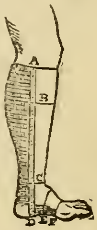
ADVERTISEMENTS.

J. & E. BRADSHAW, late

Shoolbred and Bradshaw,

34, JERMYN STREET, beg to call attention to the various improvements in PATENT ELASTIC STOCKINGS, BELTS, KNEE-CAPS, SOCKS, and Ladies' and Gentlemen's SPINE SUPPORTERS. A new description of BELT, invaluable for prevention of Cholera, and the cure of Rheumatism, Lumbago, etc. N.B. Every description of INDIA-RUBBER BANDAGE, vulcanized on the newest principle.





Directions for measurement sent by post.—N.B. A liberal Discount to the Profession.

A female to attend on Ladies.

Pepsine.—M. Boudault begs to state that he cannot be answerable for the purity and strength of any Preparation sold under his name unless obtained from his sole Agent, Mr. PETER SQUIRE, Her Majesty's Chemist, 277, Oxford Street, London, to whom all applications respecting it must be addressed.

Second Edition of Boudault on "Pepsine", with Remarks by English Physicians; edited by W. S. SQUIRE, Ph.D. Published by J. Churchill, London. May also be had of the Author, 277, Oxford Street. Price 6d.

Savory & Moore's New Remedies, etc.

TINCTURE OF ACTEA RACEMOSA, prescribed by Professor SIMPSON in Puerperal Hypochondriasis and Depression, acute Rheumatism, etc.

CONCENTRATED ESSENCE OF SUMBUL, for Nervous Disorders, Epilepsy, Spasms, Cramp, etc., etc.

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COMPOUND SYRUP OF PHOSPHATES, or Chemical Food, and all other Syrups of Phosphates, Biphosphates, Per- and Superphosphates, which are of any medicinal value.

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COD-LIVER OIL WITH QUININE, COD-LIVER OIL WITH IODIDE OF IRON, and other genuine medicated Cod-liver Oils.

143, NEW BOND STREET, LONDON.

Savory and Moore's New Eye DOUCHE for weak and inflamed eyes, and for strengthening them when they have been fatigued or overstrained.

SAVORY and MOORE'S NEW EAR DOUCHE (patent) for syringing the ears. "The principle and application of which are highly approved by the medical profession."—*Lancet*, May 4th, 1861. "They are most useful instruments."—*Medical Times and Gazette*, May 4th, 1861.

143, NEW BOND STREET, LONDON.

BRITISH MEDICAL ASSOCIATION.

ANNUAL MEETING.

The TWENTY-NINTH ANNUAL MEETING of the BRITISH MEDICAL ASSOCIATION will be holden in CANTERBURY, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

President—C. RADCLYFFE HALL, M.D., F.R.C.P.L. and E., Torquay.
President-Elect—ALFRED LOCHÉE, M.D., F.R.C.P.Lond., Canterbury.

The Meetings of the Association will take place at St. George's Hall.

TUESDAY, JULY 23rd.

1 P.M. Meeting of Committee of Council in the Reading Rooms, St. George's Hall.

2.30 „ Meeting of the General Council of the Association at the Reading Rooms, St. George's Hall.

7 „ First General Meeting of the Association at St. George's Hall. The retiring President will make a few remarks. The new President will deliver an Address. The Report of Council will be presented, and other business transacted.

WEDNESDAY, JULY 24th.

8.30 A.M. Public Breakfast at the Corn Exchange.

10 „ Meeting of the Members of the new Council.

11 „ Second General Meeting of Members. The Address in Medicine will be delivered by W. O. MARKHAM, M.D., of London. Papers and Cases will be read. The Meeting will adjourn at One and reassemble Two P.M., when the Reports of the Benevolent Fund will be read. By the kind invitation of the Very Rev. the Dean of Canterbury, this Meeting will take place at the Deanery.

8 P.M. *Soirée.*

THURSDAY, JULY 25th.

11 A.M. Third General Meeting of Members. The Address in Surgery will be delivered by GEORGE HOFFMAN, Esq., of Margate. Papers and Cases will be read.

6 P.M. Dinner at the Corn Exchange. Tickets One Guinea each.

Gentlemen intending to be present at the Dinner, are requested to send notice, as early as possible, to ROBERT TASSELL, Esq., St. Margaret's Street, Canterbury.

Members are requested to enter, on arrival, their names and addresses in the Reception Room, St. George's Hall; where cards will be supplied which will secure admission to all the Proceedings, and contain such information as may be useful to those who are strangers to the city.

Members who wish for previous information may communicate with ROBERT TASSELL, Esq., St. Margaret's, Canterbury.

It is particularly requested that all Members who propose to read Papers, will communicate with the General Secretary without delay. Papers are promised by Spencer Wells, Esq.; P. C. Price, Esq.; William Martin, Esq.; George Rigden, Esq.; Dr. B. W. Richardson; and Edward Lund, Esq.

Among the principal Hotels, are—the Fountain; the Rose; the Fleur-de-Lys; and the Freemasons'.

Worcester, June 15th, 1861.

PHILIP H. WILLIAMS, M.D., General Secretary.

PULVIS JACOBI *VER.*, NEWBERY'S.
Eſtabliſhed A.D. 1746.

Recommended by A. Tweedie, M.D., Phyſician to the London *Fever* Hoſpital, and the late John Cheyne, M.D., F.R.S.E., M.R.I.A., Phyſician to the Hardwicke *Fever* Hoſpital, Dublin.

Prices for Diſpenſing ¼ oz. Bottle, *3s. 4d.*; 1 oz. *9s.*
Uſual Diſcount to the Profeſſion.

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Pepsine.—The Liq. Pepsiniæ, as used and recommended by Dr. NELSON, can be had from Messrs. W. & C. R. TITTERTON, 6, Snow Hill, Birmingham.

Great Saving in the Purchase of SIX GROSS of NEW MEDICAL GLASS BOTTLES and PHIALS. assorted to suit the convenience of Purchasers, at S. ISAACS and SON, Glass Bottle Manufacturers—London Warehouse, 24 and 25, Francis Street, Tottenham Court Road.

6 and 8 oz., any shape, plain, or graduated....	8s. 0d.	per gross.
3 and 4 oz. ditto ditto	7s. 6d.	„
½ oz. Moulded Phials	4s. 6d.	„
1 oz. ditto	5s. 6d.	„
1½ oz. ditto	6s. 0d.	„
2 oz. ditto	7s. 0d.	„

NOTICE.—S. ISAACS and SON beg to return their sincere thanks to the Medical Profession for past favours, and beg to inform them that in consequence of the great increase in their business, they have removed to more extensive premises, and hope by adhering to their usual attention and punctuality to receive a continuance of their favours at their new London Warehouses, 24 and 25, Francis Street, Tottenham Court Road. Packages free. Remittance on receipt of Goods. Post-office Orders payable to S. ISAACS and SON, at the Post Office, Tottenham Court Road. Bankers—Unity Bank.

Original Communications.

RECENTLY OBSERVED FACTS RELATIVE TO THE PATHOLOGY OF THE PROSTATE.

By Henry Thompson, F.R.C.S., Assistant-Surgeon to University College Hospital, etc.

II.—Tumours of the Prostate.

Under this heading, I refer only to tumours which possess a so-called benign tendency. The prostate is liable to be affected by tumours of a cancerous kind, but these are very rare as compared with those now under consideration. It would be difficult to find above thirty recorded cases of undoubted cancer of the prostate; and a generalisation of the facts afforded by these, presents little which need be noted here. The simple tumours, on the other hand, are exceedingly common, as will be seen below.

i. *Simple Tumours.* The formation of small isolated tumours in the substance of the prostate is a circumstance very frequently observed when making dissections of the organ. They are of small size, ranging from that of a pea, or smaller, to that of a cherry; the latter size being rare. Their growth is slow; their consistence is firm; their structure closely resembles that of the prostate itself, especially the stromal or non-glandular tissue of the organ; their histological characters are altogether simple or benign, and wholly unlike those of any cancerous growths. Perhaps they are most commonly found in the lateral lobes, especially at their posterior extremities. Occasionally they are imbedded [in the median portion, "middle lobe", whether this part is enlarged or not. Sometimes they appear just under the capsule, and so spring from the surface, carrying in an outward direction the capsule as a covering, but nevertheless escaping altogether the contour of the gland, and looking almost like an independent or outlying formation. Occasionally they are really "outlying"—*i.e.*, separated by an interval from the prostate itself. A space of half an inch has been seen to intervene between such a tumour and the adjacent gland; a narrow line of duct, with other vessels and a little tissue, alone connecting them.

Their existence is important, practically speaking, in one point of view. While a prostate which is simply hypertrophied may become largely so under certain conditions, without affecting materially the functions of the bladder or urethra, and causing little or no obstruction to the outflow of urine, one of these small tumours developed at the neck of the bladder may produce almost complete inability to micturate. The small, firm, rounded projection which it constitutes, fills up the internal meatus, closes it almost entirely against the natural efforts to relieve the bladder, and renders necessary the artificial aid of the catheter. At the same time, these circumstances existing, little or no enlargement of the prostate may be present or ascertainable by rectal exploration, and little or no difference in the length or the curve of the catheter is required for the case. These conditions, which are undoubtedly exceptional, I have nevertheless not unfrequently observed during life and verified after death.

Tumours of this kind do sometimes exist in non-hypertrophied prostates; but much more generally the reverse is the case.

Thus, among the 164 preparations of the prostate from individuals at or over 60 years of age, which have been referred to in the preceding paper, in 57, isolated tumours were present, and easily demonstrable. In about *one-fourth of these cases, the organ did not exceed the natural weight;* they therefore do not rank with hypertrophied prostates. In the remaining three-fourths, tumour and hypertrophy coexisted. I have seen small tumours present, but producing no enlargement whatever, as early as 50 years of age.

We have thus a condition quite distinct from hypertrophy, but liable, like it, to produce obstruction to the outflow of urine, and chronic retention and engorgement of the bladder, in elderly subjects—a condition which requires similar management also, in all respects. The practical lesson is one which relates to diagnosis; and it is simply this, that we are not to affirm the absence of obstruction at the neck of the bladder, and infer the existence of paralysis affecting that viscus, when it is unable to empty itself by voluntary efforts, because we discover no enlargement of the organ by rectal or by urethral examination. The obstruction may be, and in these circumstances it not unfrequently is, due to the existence of a small rounded tumour developed in the substance of the prostate, but projecting considerably into the urethral canal, and usually, although not invariably, in or near to the situation of the uvula vesicæ.

I possess drawings of several examples in which great difficulty in passing urine existed during life, although the prostate was but very slightly hypertrophied; and the obstructing portion, which just filled the neck of the bladder, was not larger than a small nut. In some of these the obstacle was constituted by a small tumour, covered by a thin layer of prostatic tissue proper, from which it was turned out entire on making a section of the enveloping structures.

ii. *Outgrowths from the Prostate.* These appear to stand midway between the isolated tumours and the general hypertrophy of the organ. The typical example is the so-called enlarged "middle lobe", when it assumes a pyriform shape, being attached to the prostate by a pedicle, and often projecting far into the cavity of the bladder. It is so well known as to need no further notice here.

FEVER IN THE ZAMBESI.

By David Livingstone, M.D.

[*Read before the Epidemiological Society, June 3rd, 1861.*]

In the typical cases given in Dr. McWilliam's *Medical History of the Niger Expedition*, the gall-bladder was found distended with black bile; and, if my memory do not deceive me, most of the cases treated with quinine at an early period of the disease either recovered, or were subjected to the milder or intermittent form of fever.

In 1850, I adopted the plan of giving quinine mixed with a purgative as the first step of the treatment, and was successful in the cases of two of my own children and an English party whom we found at Lake Ngami, and of whom one had died before our arrival. I have lost the notes of my reasons for adopting the practice; but I have been successful in every case I have met with since. The prescription employed is resin of jalap and calomel, of each eight grains; quinine and rhubarb, of each four grains. Mix well together; and, when required, make it into pills with the spirit of cardamom. Dose, from ten to twenty grains. The violent headache, pains in the back, etc., are all relieved in from four to six hours; and with the operation of the medicine there is an enormous discharge of black bile; the patient frequently calls it blood. If the operation be delayed, a dessert-spoonful of salts promotes the action.

Quinine is then given till the ears ring, etc. We have tried to substitute other purgatives instead of the resin of jalap and calomel; but experiments have only produced the conviction that aught else is mere trifling. No strength is lost in our march up the river of six hundred miles on foot. An European would be stricken down in one day, and the next after the operation of the remedy would resume his march on foot. In some very severe attacks, it was necessary for the patient to travel upon a donkey; but, after two or three days, he would prefer to tramp it.

We tried Warburg's tincture, which has a great reputation in India; but it causes profuse sweating, and does not cure the disease. The strength is also impaired. We had a good supply, by the kindness of one of our nobility; but I am compelled to say that it did not answer our expectations. The daily use of quinine is no preventive. We have seen many cases of fever occur when the person was on the verge of cinchonism.

I employed the foregoing remedy with success on the west coast; but made no fuss about it, more than make a general statement in the *Missionary Travels.* I was not quite sure that our fever was identical with that which Dr. McWilliam encountered in the Niger; but the melancholy fate of a party of missionaries at Linyanti, where six out of nine Europeans, and four native attendants, perished in the short space of three months, makes me fear that it is the same complaint as that which destroyed the officers of Commodore Owen in the Zambesi, those of Captain Tuckey in the Congo, and the crews of the great Niger Expedition in that river. My companions, Dr. Kirk and Mr. C. Livingstone, entertain the same idea of the value of our pills as I do. We wrote a paper for one of the medical journals. But the above sad case makes us anxious that the remedy should become more extensively known than it has been, and I do not know a better plan for effecting this than by communicating it to Dr. McWilliam.

Those who may try the remedy will do well to remember that the above doses are for strong adults.

I cured myself and native companions in this way during my long journeys between 1852 and 1856; and that the remedy has no bad effect on the system, may be inferred from the fact that I have had no regular attack of fever since my return. I have had little illnesses, probably from exposure to malaria in its most intense forms, but nothing like what I formerly experienced; and I am of opinion that what we were all taught, not to give quinine till we had used the preliminary measure of relieving the bowels, was a mistake.

Might the remedy not be applied to some of the fevers at home that arise in unhealthy localities? Around every village in this country there is a very large collection of human ordure during the dry season; this is swept into the rivers by the heavy rains; and you may guess the effect from hundreds of thousands of villages. The natives here do not drink the water as the natives do on the banks of the Thames, but make holes in the sand to draw from. Possibly this has as much to do with the origin of fever as it has at home.

I give a specimen of the difference between dry and wet bulb, Victoria Falls, 24th Sept., 1860.[*]

	Air.	Wet Bulb.	Difference.
In shade at 9 A.M.	87°	59°	28°
„ 12 M.	96.5°	63°	33.5°
„ 3 P.M.	96°	60°	36°[†]

The greatest difference Dr. McWilliam observed, was, I believe, 16°; generally it was 6° or 7°.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, June 3rd, 1861.

Gavin Milroy, M.D., in the Chair.

FEVER IN THE ZAMBESI. BY DAVID LIVINGSTONE, M.D.

A note from Dr. Livingstone to Dr. McWilliam, on Fever in the Zambesi, transmitted by Captain Washington, R.N., F.R.S., Hydrographer to the Admiralty, was read by Dr. McWilliam. The note is published on the preceding page: it is dated from Tette, November 28th, 1860.

Dr. McWilliam observed, that anything coming from Dr. Livingstone was sure to command attention and interest; and that he therefore had had great satisfaction in bringing his brief communication before the Society. He (Dr. McWilliam) had not been in any of the rivers on the east coast; but off the coast of Mozambique, he had treated fever, which he found of a much more tractable nature than that which he had encountered on the west coast, more especially in the Niger. But, from what he had learnt from the traders at Mozambique, he feared that the rivers on the east coast of Africa were not much less inimical to European life than those of the west coast. The Zambesi was about 25° south of the Niger; but there seemed to be no defect of that important element in the causation of fever—heat—in the Zambesi, according to the day's meteorological observations which Dr. Livingstone had appended to his paper. The difference between the temperatures of the dry and wet bulb thermometers was far beyond anything he had met with in the Niger, and indicated an unwonted dryness of the atmosphere in the Zambesi. With regard to the treatment so successfully employed by Dr. Livingstone, the principle was of course not new, although he was not aware that the precise formula of that eminent traveller had hitherto been used; and as other purgatives than jalap, calomel, and rhubarb, in combination with quinine, had failed in Dr. Livingstone's hands, it was desirable that the prescription which he recommended should have further trial. To this end, he (Dr. McWilliam) would endeavour to give it all possible publicity. Dr. Livingstone had alluded to the mortality in other African expeditions; and it might not be uninteresting to the Society that he (Dr. McWilliam) should briefly recapitulate the losses sustained in the expedition to the Congo in 1816; to the Zambesi, from Captain Owen's ship, in 1823; to the Niger, under Laird, Lander, and Oldfield, in 1832; and to the Niger, under Captain Trotter, in 1841-2. He should also state the mortality in the *Eclair* in 1845; and, although not in chronological order, the dreadful loss sustained by two detachments of soldiery at the Gambia in 1825.

Captain Tuckey, in H.M.S. *Congo*, entered the River Congo, on the south-west coast of Africa, in latitude 6° south, on the 6th July, 1816. His crew at this time consisted of—officers, 7; naturalists, etc., 5; petty officers, seamen, and marines, 40; natives of the Congo, 2; total, 54. After pursuing the voyage for some way up the river, a party of thirty proceeded on a land expedition beyond the cataracts of the river. Of this party, fourteen died of fever, and four died on board the *Congo*, all within the space of three months. One man also died from the effects of river-fever, after leaving the river. Total loss, 19. Of 7 officers, 3 died; of 5 naturalists, 4 died; of 40 petty officers, seamen, and marines, 12 died; total deaths, 19.

Mr. McKerrow, the medical officer, describes the weather as pleasant; the thermometer seldom exceeding 76°, or being lower than 60° Fahr.; with scarcely any rain, and the atmosphere dry. He describes the fever as an intense remittent—with, however, black vomit in some cases. Bleeding (contrary to the accounts of the missions to the Congo by Carli, Merolla, and others) was unsuccessful as a remedy. Cathartics were useful; and calomel, given so as to affect the constitution rapidly, was of great service, followed up by wine and bark.

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[*] The temperatures of the dew-point in the three observations respectively are, according to the formula of Glaisher, 42°, 50.2°, and 54°.—J. O. McW.

[†] Once the difference was 40°.

The canoe expedition from Captain Owen's ship up the Zambesi, referred to by Dr. Livingstone, consisted of Lieut. Brown; Mr. Forbes, midshipman; Mr. Kilpatrick, assistant-surgeon; and two black servants. They left Quilimane on the 23rd of July, 1823. On the 3rd of August, being then in the Zambesi, Mr. Forbes was taken with fever, and died on the 15th. On August 27th, Lieut. Brown was seized, and died on September 5th. Mr. Kilpatrick was attacked on September 1st, and was likely to recover; but some imprudence caused a relapse, which proved fatal to him on October 28th. The blacks got out of the river safe.

In the expedition to the Niger in 1832, in the *Quorra* and *Alburkah* steam-vessels, under McGregor Laird, Lander, and Oldfield, there were in the first-named vessel, besides Kroomen engaged on the coast, a crew of twenty-six persons; while the *Alburkah's* crew consisted of fourteen only. After some delay at Sierra Leone and Cape Coast, both vessels entered the Nun branch of the Niger on October 18th, 1832. The captain and engineer of the *Quorra* died immediately after the vessels entered the river. The boatswain of the *Alburkah* also sank under fever at the same time. On November 12th, when the vessels were at Damagu, someway above the Delta, many in both vessels were laid down with fever; and on the 14th one European only in the *Quorra* was fit for duty. On November 21st, the *Quorra* had lost thirteen, and the *Alburkah* two men. On December 8th, there remained alive in the *Quorra* four persons only, including Mr. Laird. Mr. Laird, after various relapses in his own person and the loss of others of his crew, descended the Niger, and reached the sea on Aug. 19th, 1832. The *Alburkah* returned to the mouth of the river in November of the same year. The total deaths among Europeans in the *Quorra* were 24; survivors, 5. Deaths in *Alburkah*, 15; survivors, 4. Besides these, eight or nine Kroomen died from poison.

The chief part of this mortality occurred within three months after the vessels began to ascend the river. Owing to the death of Dr. Briggs at an early period of the expedition, we have no account of his treatment on board the *Quorra;* but McGregor Laird acquaints us that Lander bled and blistered the sick, and gave emetics and purgatives at the outset of the disease. Blisters to the head appeared to do good in some cases, as in Mr. Laird's own case. Mr. Oldfield administered purgatives, shaved the head, and applied cold lotions. He also used mercury until slight ptyalism was produced.

In the expedition of 1841 to the Niger, under the command of Captain Trotter, consisting of the iron steam-vessels *Albert*, *Wilberforce*, and *Soudan*, the vessels entered the Nun branch of the Niger on August 13th, 1841, and commenced the ascent of the river on the 19th. At this time, the strength of the expedition was as follows:—

	Albert.	Wilberforce.	Soudan.
Officers, seamen, and marines	62	56	27
Men of colour of various nations entered in England	15	7	3
Blacks entered on the coast .	76	39	18

The expedition was at Ibu, below the apex of the Delta, and upwards of one hundred miles from the sea, on August 26th; and at Iddah, the capital of Eggarrah (where rock of ferruginous sandstone was first seen), on September 2nd. Fever broke out in the *Albert*, and almost simultaneously in the other vessels, on September 4th, and ceased not until it had paralysed the whole expedition. On September 10th, notwithstanding the persistence of the disease, the expedition was at the confluence of the Niger and Tchadda. Here, however, it was found necessary to despatch the *Wilberforce* and *Soudan* to the sea with their own sick, and those of the *Albert* on the 19th. The *Albert* proceeded upwards on September 21st, and reached Egga, the Nufi capital, on the 28th. On October 4th, there remained fit for duty one seaman, two marines, Mr. Willie (mate), Dr. Stanger, and Dr. McWilliam. It was then resolved to return to the sea, which was reached with difficulty on the 14th, and Fernando Po on the 17th of the same month.

The *Albert*, which was sixty-four days in the river, lost by death, in the river, at Fernando Po and Ascension, 23 persons; the strength in whites being 62.

The *Wilberforce*, forty-five days in the river, lost by death, on board and at Fernando Po, 7 persons; the strength in whites being 56.

The *Soudan*, which was in the river forty days, lost 10 men from fever; the white strength being 27.

Of the men of colour entered in England (25), 11 were attacked with fever in the river, but none died. Of 133 blacks entered at Sierra Leone, not one was even attacked. Every precaution which human ingenuity could suggest was taken to ensure the health of this expedition. Provisions were of the best kind—preserved meats and vegetables. Medical comforts of every kind were supplied. The ships were ventilated upon Dr. Reid's plan. Coffee was supplied to the crews early in the morning, and quinine in wine was liberally administered. The treatment consisted of purgatives, diaphoretics, and quinine; the last often early in the disease, either combined with calomel, or by itself. Blisters to the nape of the neck were sometimes beneficial. General bleeding could not be tolerated.

The mortality on board the *Eclair* in 1845 was as follows:—The crew amounted to 140. From April 1st to June 30th, off the island of Sherbore, west coast of Africa, several of the boats having been up the river, there were 10 deaths. From July 1st to August 31st, at Sierra Leone, the Gambia, and Boa Vista (Cape de Verde), there were 16 deaths. In a crew now reduced to 114, from September 1st to 21st, at Boa Vista and Madeira, there were 33 deaths, or at the rate of about 29 per cent. in three weeks. From September 21st to October 3rd, between Madeira and England, and at the Motherbank and Standgate Creek, there were 10 deaths, making in all 69.

The following summary of the mortality in the expeditions was given;—

	Per cent.
Mortality in the Congo in three months .	36.54
In Lander and Laird's expedition of 1832, in less than two months	81.25
In the expedition to the Niger in 1841-2, under Captain Trotter, nearly the whole of the mortality of which from fever took place within two months, and all within four months	28.96
In the *Eclair* in six months . . .	49.28

But these heavy rates of mortality are surpassed by what took place at the Gambia in 1825, where a detachment of 108 men (whites) arrived at the end of May, just as the rainy season commenced. Of this number, there remained alive on September 21st of the same year, 21; the mortality having been, within the space of four months, 82.85 per cent. Another detachment of 92 men, which in the meantime had been on board of a transport at the anchorage, and which while there did not lose a man, was landed about the end of September, and made up the force to 112. Of this number, there had perished of fever 61, and of other diseases, including 6 from fever following punishment, 12; total, 73, or at the rate of 65.17 per cent. during less than three months. During this fearful mortality, a detachment of from forty to fifty black soldiers of the 2nd West India Regiment lost only one man, and had seldom any in hospital.

To go back still further; Mungo Park, on his second journey to the interior of Africa, left the Gambia on the 28th of April, 1805, having with him, besides Mr. Anderson, Mr. Scott and Lieut. Martin, 34 soldiers, 4 carpenters, and 2 seamen, in all 44 Europeans. He did not reach the Niger at Bambakoo until the 19th August, far into the rainy season, having had to traverse 500 miles of a country fertile of disease and beset with danger. Dysentery and fever had, by this time, made sad havoc among his people; for there remained alive only 11 out of the whole, and on the 11th of October all save 4 were dead. Whether any whites except Lieut. Martin survived to perish with him at Boussa, some time in November has not been ascertained. Park himself had severe dysentery, which he considered he cured himself of with mercury pushed to salivation.

The discussion was continued by Dr. Stratton, R.N., Dr. Milroy, Dr. Weber, Mr. Radcliffe, and Dr. Haward.

ON YELLOW FEVER IN THE WEST INDIES AND WEST COAST OF AMERICA. BY ARCHIBALD SMITH, M.D.

[*In a letter to* James Copland, M.D., F.R.S.]

Dr. Smith, in a letter transmitting to Dr. Copland an elaborate paper "On the Spotted Hæmorrhagic Yellow Fever of the Peruvian Andes in 1854-5-6, etc." (to be read at the meeting of the society in July), observed that, on the 15th December, 1858, he was one of many passengers that embarked in the steamer *Valparaiso*, in the Bay of Panama, for Callao, the seaport of Lima. On the evening of the 16th, he was requested to see a sick person, whom he found in the last stage of yellow fever, with black vomit. The patient, an engineer, had only come on board the preceding day from Taboga, where he had been for some time previously ill with fever, but was supposed to be convalescent. He died on the morning of the 17th.

This case was soon followed by others. Among the first were one of the deceased's coadjutors and companions, and an Italian who attended on some of the cabin passengers. Next one of the passengers was seriously affected. Indeed, many of the passengers complained, and really felt, or imagined they had premonitory symptoms of the disease, while oppressed by the humid and sultry atmosphere between Panama and Guayaquil. No sooner, however, did they make the breezy shores of North Peru, than all such uncomfortable feelings disappeared, and the morbid element, or contaminated air on board, was dissipated, and the vessel arrived at Callao on the 28th Dec. in a healthy condition.

On Dr. Smith's homeward voyage for Lima, in Dec., 1860, in the steamer *Bogota*, in conversation with Capt. Wells, of that vessel, he learned that in 1859 one half of the men, in all 30, then employed at the Pacific Steam Company's Depôt at Toboga, died of yellow fever. It was ascertained that if the ship went alongside the wharf to coal, two or three of the men were sure to contract fever; but that if the vessels retired 400 yards seaward from the wharf the sick soon recovered, and none were attacked at that distance.

Captain Rivett, of the Atlantic royal mail steamer *Seine*, also acquainted Dr. Smith that he has gone alongside the collier vessels at St. Thomas's, with his crew in a state of perfect health and efficiency; and that, without any further communication than getting coals from a collier on each side having yellow fever patients in hammocks, he, on going to sea, had, in a few days, many ill of yellow fever, which speedily carried off nine of his crew.

After entering into a discussion derived from information on board the steamer in which he came home, with reference to the *Icarus* at Port Royal, and already brought before the society by Dr. Bryson, Dr. Smith adverted to the yellow fever epidemic at Guayaquil in 1842-5. He considered that the disease on the occasion in question, was introduced into that equatorial city by a schooner called *La Reina Victoria*. From Dr. Destrange, of Guayaquil, an accomplished Frenchman, and one of the old medical staff of General Bolivar, Dr. Smith obtained information which he considers conclusive on this head. According to Dr. Destrange, the schooner *Reina Victoria* lay for many days at anchor in the port of Chiriqui, in the province of Veragua, where she took in for ballast wet and gravelly mud. From Chiriqui she proceeded to Panama, where she took in passengers from New Orleans and the West Indies, where yellow fever at that time prevailed. From Panama the vessel went on to Guayaquil, touching at Buonaventura. In the transit from Panama to the first seaport, two of the passengers died, and were buried there. After forty-eight hours, she proceeded on the voyage southwards, notwithstanding she had some sick on board. Before arriving at the mouth of the River Guayaquil another death occurred, and the corpse was committed to the deep, when she reached the anchorage off the island of Puma. She was reported as an infected vessel; but as the person who owned her had great influence, she was allowed to proceed and land her cargo and passengers. The day after the schooner anchored at the lower part of the city of Guayaquil, which is built on the banks of the river, the captain, labouring under fever, was conveyed from the *Reina Victoria* to his house on shore, and was soon after seized with black vomit, and died in three days, his death being ascribed by his medical attendant to melæna. In less than ten days the captain's wife, two children, and three other persons in the house, all fell victims to the fever. On the 7th September, two of the crew were transferred to a house on shore, where Dr. Destranges saw them. They had been sick for six days, and the doctor observed that they had subcutaneous hæmorrhage, epistaxis, and other symptoms of yellow fever. Both died on the following day. After these cases the carpenters and caulkers and other persons who had direct communication with the *Reina Victoria* were attacked with yellow fever, and returning to their homes propagated the disease in all directions. In less than twelve days, more than forty persons had died of fever. The schooner was removed up opposite to the centre of the town, and put out her ballast; and there fever broke out anew. On the 9th of October, was celebrated the anniversary of national independence. The people congregated at public diversions, and, returning to their homes, were taken ill, and disseminated the disease all around. Now the victims increased rapidly; and by the end of November the deaths amounted to 135 per day, in a population under 18,000. By the 8th December, the violence of the disease was abating, and the mortality decreased to about 15 or 10 per cent. of those attacked. The disease also broke out at Buenaventura, after the *Reina Victoria* left her dead there, and proved very fatal to the inhabitants of that place.

The discussion of this paper was postponed until the next meeting, when Dr. Smith's paper on the "Yellow Fever of the Peruvian Andes," will be read.

Montrose Lunatic Asylum. At the annual meeting of the governors of this institution, in Montrose, it was stated, in the reports, that the number of patients treated during the year had been 591; and the number remaining in the house at the end of the year was 432. In eighteen instances the cause of insanity is stated to be 'religion,' or 'religious excitement.' In eight of these, however, religious delusions at the commencement of the illness had been mistaken for its cause. The other ten originated in the excitement of attending revival meetings.

British Medical Journal.

SATURDAY, JUNE 29th, 1861.

IS A SURGEON, WHO CONSORTS WITH HOMŒOPATHS, FIT TO BE A MEMBER OF THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS?

In conducting the organ of the British Medical Association, it becomes our duty to take notice of any events which affect the social and moral as well as the scientific position of our profession; and, if occasion demand, to give warning of danger, even though its existence be problematical. At the present time, we are called on again to enforce, by persuasion and argument, the strongly expressed opinion of the Association regarding the conduct of those members of the profession who meet homœopaths in consultation. At various times, both in its collective capacity, through its Branches, and through the voices and writings of individual members, this Association has established as a principle, that any medical man who knowingly meets a homœopath in consultation is unworthy of the confidence and professional companionship of his brethren. And not only has the Association spoken; but, wherever the professional voice has been uttered, it has always been in condemnation of dealings with homœopaths—never, as far as we remember, in support of such practice.

The strong and decided action which the Association and profession have thus taken, and which it is the duty of this Journal to support, has arisen out of the conviction that the delusive creed of homœopathy gains no firmer support than that which it receives from the hands of those practitioners of orthodox medicine who commune, in matters professional, with men of the "*similia similibus*" school. Against the example of those who act in this manner, it is our office to raise the voice of warning; and especially so, if there be reason to believe that any such are aspiring to places of honour in the profession.

Last week we brought under the notice of our associates the facts, as far as they have been made known, relating to the coming election of new members into the Council of the Royal College of Surgeons; and there would probably be little or nothing to add to what was then said, were it not that a disagreeable rumour has reached us, and has been so often repeated in our ears that we cannot conscientiously do otherwise than acknowledge its existence, and make it public, in order that its truth or its falsehood may be determined. The rumour is this: that one of the newly nominated candidates—a London surgeon of the highest eminence—is in the habit of consorting with homœopaths in the way of professional consultation.

Now this is a most serious matter for the consideration of the Fellows of the College. If they elect into their Council any one who thus encourages homœopathy, they not only place him in an anomalous position, but they inflict a grievous harm on their profession. A companion of homœopaths, elected into the College Council, or into the governing body of any of our great corporate institutions, would indeed be in an anomalous position. For, in the Council, he would take part in the deliberations of a body, whose duty it is to promote with its best efforts the progress of medical science, and to guard with care the honour of the medical profession; going out of it—where he may have taken part with his colleagues in passing resolutions condemnatory of homœopathy—he would perhaps straightway proceed to consult with men whose life's object it is to decry and, if possible, destroy those doctrines which have come to us with the authority of antiquity, of reason, and of experience, and to throw abuse and ridicule on those who honestly and unswervingly follow them. Again, the election of such a man must shake confidence in the ability—we had almost said the integrity—of the body so receiving him, as custodians of professional science and honour. And not only would there be a loss of confidence within the profession; but in like proportion, among the homœopaths, would there be an accession of confidence. With what exultant satisfaction would they point to the fact that a member of the Council of a medical corporate body, of the highest professional standing, had none of the squeamish scruples of his fellows, but boldly and cheerfully recognised them as fellow-practitioners! What encouragement, too, would be given to those followers of legitimate medicine whose ethical code is, unfortunately, too lax to prevent them from meeting homœopaths at the bedsides of their patients! What a bridging over there would be of the gulf, generally considered impassable, between orthodox medicine and homœopathy! Nor must we lose sight of justice to those younger members of the profession, who steadfastly refuse to degrade their character by consulting with homœopaths, and prefer to struggle on in an honourable course, even through the road they have rejected would lead more readily to worldly wealth. It would be enough to discourage such men, if any one of the head bodies of the profession contained a member who followed with impunity a practice which they had been taught to despise and avoid.

We trust that the Fellows of the College will, before giving their votes on Thursday, make due inquiry into the truth of the report to which allusion has been made. If it be untrue, let it be at once and for ever silenced, and let the high professional attainments of the candidate who is the subject of it have their full force in deciding the election. But if it be true, no feelings of respect for scientific eminence, nor of private friendship, ought to stand in the way of a distinct expression of his unfitness for the post to which he aspires. Let it be shewn to the world, that not even the highest reputation in professional skill shall entitle a man to the confidence of his brethren, if he so far forget his obligations to truth and to science, as to countenance by word or deed the delusions of a creed founded in error and supported by ignorance.

Having thus laid the matter before the Fellows of the College of Surgeons, and relieved our conscience of a painful but imperative duty, we leave it in their hands, in the full confidence that they will make it the subject of conscientious and careful investigation, and will support us in maintaining, without respect of persons, the purity of medicine.

THE WEEK.

The medical profession rarely ever shines in the witness-box of a court of justice; more generally it cuts a very sorry figure there. And when the profession appears there in the position of advocate—as too often happens—its appearance on the public legal stage is for the most part still more unfortunate. It usually gains there, under such guise, neither respect nor credit. The Court of Exchequer was last week the scene of a medical tournament, which we cannot but think was a very unfortunate, not to say discreditable, exhibition. An action was brought against Mr. Edward Halford, a surgeon, for alleged negligence in attending Mrs. Gattie, the plaintiff, during her confinement, by reason of which she suffered much unnecessary pain, and has continued lame ever since. Mr. Halford is a man of considerable experience in midwifery, and a highly respectable practitioner; and it appeared from the evidence that he had, under the circumstances of the case, acted throughout according to the best of his skill and judgment. Nevertheless, as we find from the report in the *Times*, "Dr. Barnes, Dr. Murphy, and Mr. Margetson, being called on behalf of the plaintiffs, gave evidence to show that the use of instruments in a case of the present kind, without assistance, was wrong; and that the injuries from which Mrs. Gattie was now suffering were caused by the pressure of the forceps on the fibres of the sciatic nerve; and to prove that such injuries could not have resulted from natural causes. These also gave evidence showing that the defendant did not administer chloroform in a proper manner." Happily, however, Mr. Halford was able to upset the prejudice which the statement of these three professional brethren naturally excited against him, by the powerful evidence of Sir Charles Locock, Dr. Ramsbotham, and Mr. I. B. Brown; and the jury eventually brought in a verdict for him—the defendant—acquitting him of all blame. Every member of the profession must regret that such scenes of antagonism should occur in a court of justice, and especially regret that men should be so readily found to bear down hardly upon a brother medical man. We are justified in saying this, because the evidence of Sir C. Locock, Dr. Ramsbotham, and Mr. Brown, being so distinctly in favour of Mr. Halford's conduct of the case, cannot be considered as otherwise than condemnatory of the evidence of Dr. Barnes, Dr. Murphy, and Mr. Margetson. With regard to the latter gentleman, we must say that we think he would have shown better taste had he altogether refrained from appearing in the case—at least, on the side upon which he figured; for, as the report runs, it would appear that he was not altogether an unconcerned witness. "If Mr. Halford" (in case of emergency) "was unable to obtain the services of Dr. Tyler Smith and Mr. I. B. Brown, he should have called in some other medical man—a Mr. Margetson, for instance, who lived close by, and who had attended Mrs. Gattie before." Heaven forbid that we should endeavour to screen a medical man from the legitimate consequences which might legally befall him from mischief done through gross ignorance or gross negligence; but, as we have said, there was in this case no pretence of this kind made against Mr. Halford. We all know only too well how ready both judge and jury generally are to punish severely the shortcomings of legitimate practitioners of medicine, however easy they let the quacks off. Consequently, when we venture into a court of justice to condemn the practice of a brother, we should do so only as a painful necessity, and scarcely in a case wherein men like Sir C. Locock and Dr. Ramsbotham and Mr. Brown could assert that the practice criticised was proper. Besides this, in our profession, above all other professions, men are liable to wrongful abuse and misunderstanding, and therefore especially demand the support and consideration of their own brethren in medicine. To assert what, as it would appear, the doctors for the plaintiff did assert—viz., that a medical man in attendance on a case of midwifery should neither give chloroform nor use the forceps without calling in the aid of another practitioner, is to assert a plain absurdity, and to condemn the necessary practice of half the practitioners of this country.

The Government has decided that Parsee medical men shall not hold appointments as surgeons in Her Majesty's regiments; and, under the circumstances of the case, as they appear detailed in Parliamentary reports, the government could not have done otherwise. Dr. Gibson, the head of the Army Medical Department, when applied to on the subject by Lord Herbert, said "he thought they were physically incompetent to bear, not the cold of England or the heat of any other country, but the constant vicissitudes and changes of climate to which they would be exposed in our service." Not satisfied with this, Lord Herbert took the opinion of Dr. Gibson, Sir John Liddell, and Sir R. Martin. He asked them to go into the whole subject. This they did, and reported as follows:—

> "It is our deliberate opinion, founded on experience, that the native and mixed race of India and other tropical countries will never be able to sustain, for any length of time, the climate of our northern regions, and that they can only be employed advantageously to the public service in climates similar to those in which their race exists."

The opinion of these gentlemen naturally carries with it great weight; but we must confess that in matters of this kind we like to hear the reasons and arguments on which such opinions are founded. No authority can satisfy us by mere assertion that a properly clothed Indian is not as capable of bearing changes of climate equally as well as Europeans. How is it that, for years past, we see at certain crossings in London the same Indian faces, sleek, and smirking, and salaaming — the rigors of our winter weather notwithstanding. The facts and arguments of the three gentlemen above referred to on this head would, at all events, be highly instructive and interesting. Lord Herbert assigned a different reason. He said that English soldiers would never have confidence in Indian medical men:—

> "In the case of an army surgeon everything depends upon the degree of confidence which the men have in his skill. Recollect, the men have no choice. A surgeon is imposed upon them. For a long time in our service the medical profession was not much regarded; but now we have the best skill which can be found; all the best men are coming to us. What is the result? It is that the recommendations of our army surgeons are treated with the greatest respect by our officers, and that the men have that confidence in their skill which is so essential to the success of their services. A doctor can't cure a man who does not believe in him. The noble lord may say that science has neither creed nor colour. That is quite true; but we know that Englishmen have not the same confidence in an Italian or a German doctor which they have in an English one."

It appears that, according to the letter of the law, these Indian gentlemen are, in reality, only entitled to appointments in India; and have no special claim for admission into regiments of the line. Nevertheless, it would be well that the reasons should be clearly stated why these gentlemen cannot be admitted into line regiments. We are inclined to think that the one about incapacity to bear change of climate is not the true one. There may be reasons of a social, or even of a religious kind, which would render their admission as officers into line regiments very inconvenient, and, therefore, injurious to the service.

The Earl of Ellenborough is a fantastic man, and is notorious for his funny manœuvres whenever placed in positions where he can prominently play tricks before Heaven. He is the man of Indian proclamations and Raptor of the Somnauth Gates, and now appears, in the House of Lords, as defender of the native Indian doctor. We refer to his remarks on this score, chiefly because they illustrate what we have so often maintained, the necessity for the presence in Parliaments, Lords and Commons Houses, of a man of medicine. The ignorance of his noble lordship on the subject he undertook to speak of with authority is remarkable; and as he had been in India, his words would, of course, be listened to with consideration by his compeers, there being no one present capable of answering his nonsense. Here are the words of his sapient lordship, spoken by him with solemn assurance of sufficient knowledge and official authority:—

> "I feel that I ought to state my opinion as to the general character of the native doctors of India. While in that country I had an opportunity of seeing them in contrast with European doctors. Every morning and evening I visited the hospitals, both native and European, and I must candidly say that I consider the management of the native hospitals was superior to the management of the European hospitals. And the reason was obvious. In the native hospitals there was the most perfect ventilation, while in the others there was none. I visited the European hospitals, and found the patients almost suffocated with the closeness of the rooms in which they were placed. It was thought the best had been done for them, because they were placed in a bungalow and were treated like gentlemen. The native troops, on the contrary, were in hospitals as beautiful as those which I saw years ago in Florence, or as any that are to be found now in London. I never saw men under such circumstances in greater comfort or better taken care of. There, advantage was derived from ventilation. Instead of being in houses they were under canvass, and the best ventilation is the currents of air which enter through the necessary openings in the canvass. During the time I was in India I never needed the service of a doctor; but had I done so, and placed myself under the care of an European practitioner, the probability is that I should not now be addressing your lordships. [*Laughter.*] According to the reduced establishment, there will be in future 110,000 men, who would afford ample occupation for 480 native medical officers, and I am quite sure that they will be, under the general direction of Europeans, infinitely the best persons for the duty, because they know the effect of climate, which Europeans obstinately will never learn. The same thing which in this country would produce no ill effects, there, by the influence of climate, may become fatal, and that the natives know, while the European will not known it."

His clients, the native Indian medical men, have fallen into the hands of an advocate whom they will necessarily laugh at; and, certainly, if the only way he had to defend one set of men was by abusing another—the English medical man—everyone will think that his cause is a very bad one. His lordship becomes an Old Bailey barrister with an abuse-your-adversary brief. Lord Stanley, at the dinner of the College of Physicians last Saturday week, spoke very strongly on the subject of the absence of medical men in the Parliament Houses; and used the strongest argument for the necessity of their presence there. Sanitary and social measures, he said, are the orders of the day; and who understands their details better than the doctor? Every week we find the want of a high professional voice in Parliament. Such absurd and calumnious nonsense as that spoken by Lord Ellenborough ought to have been answered on the spot where it was spoken, and at the moment. It is no great credit to our legislating authorities that it was allowed to pass without explanation or rebuke. Surely some one might have told him, that all hospitals in India are under the superintendence of European practitioners.

We are requested to state the manner in which the approaching ballot for members of Council of Royal College of Surgeons is conducted. The names of the six candidates are printed in a balloting-paper; the names of the three old members at the top, and those of the three proposed new ones beneath them. Fellows, in balloting, must be careful not to leave *more* than three names on the list they put in the box. If only one or two names be erased from the list, leaving five or four names on it, such balloting paper will not be counted. Any Fellow, however, may, if he please, vote for only one or two names. He is not compelled to vote for three. The ballot takes place at 2 P.M. precisely, and is generally closed at or before 3.

We have great pleasure in publishing, in another column, a letter from Mr. Samuel Lane, on the subject of professional intercourse with homœopaths. Mr. Lane therein says: "I have always refused to meet homœopathic practitioners, and shall continue to do so, believing as I do that those who adopt a contrary course of conduct are guilty of a dereliction of duty to the patients, to the public, and to the profession."

The students of the University of Liege have invited to a grand university fête the students of all the other Belgian universities, and for this purpose have despatched deputations to the different universities. Their enthusiasm received a temporary check at Louvain; the Rector there had forbidden the students to take part in it.—M. Larrey has presented to the Academy of Medicine, in the name of Dr. Tholozan, a treatise on Auscultation, Percussion, and Palpation, written and printed in the Persian language.—The *Bulletin Thérapeutique* recommends, as the best vehicle of santonine, simple syrup. The santonine is first of all dissolved in a little alcohol, and then added to boiling syrup.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

The Twenty-ninth Annual Meeting of the British Medical Association will be holden in Canterbury, on Tuesday, Wednesday, and Thursday, the 23rd, 24th, and 25th days of July.

President—C. Radclyffe Hall, M.D., F.R.C.P.L. and E., Torquay.
President-elect—Alfred Lochée, M.D., F.R.C.P.Lond., Canterbury.

The Meetings of the Association will take place at St. George's Hall.

Tuesday, *July 23rd.*

1 P.M. Meeting of Committee of Council in the Reading Rooms, St. George's Hall.

2.30 P.M. Meeting of the General Council of the Association at the Reading Rooms, St. George's Hall.

7 P.M. First General Meeting of the Association at St. George's Hall. The retiring President will make a few remarks. The new President will deliver an Address. The Report of Council will be presented, and other business transacted.

Wednesday, *July 24th.*

8.30 A.M. Public Breakfast at the Corn Exchange.

10 A.M. Meeting of the Members of the new Council.

11 A.M. Second General Meeting of Members. The Address in Medicine will be delivered by W. O. Markham, M.D., of London. Papers and Cases will be read. The Meeting will adjourn at One, and reassemble at Two P.M., when the Report of the Benevolent Fund will be read.

8 P.M. *Soirée.* By the kind invitation of the Very Rev. the Dean of Canterbury, this Meeting will take place at the Deanery.

Thursday, *July 25th.*

11 A.M. Third General Meeting of Members. The Address in Surgery will be delivered by George Hoffmann, Esq., of Margate. Papers and Cases will be read.

6 P.M. Dinner at the Corn Exchange. Tickets One Guinea each.

Gentlemen intending to be present at the Dinner, are requested to send notice, as early as possible, to Robert Tassell, Esq., St. Margaret's Street, Canterbury.

Members are requested to enter, on arrival, their names and addresses in the Reception Room, St. George's Hall; where cards will be supplied which will secure admission to all the Proceedings, and contain such information as may be useful to those who are strangers to the city.

Members who wish for previous information may communicate with Robert Tassell, Esq., St. Margaret's, Canterbury.

It is particularly requested that all Members who propose to read Papers, will communicate with the General Secretary without delay. Papers are promised by Spencer Wells, Esq.; P. C. Price, Esq.,; William Martin, Esq.; George Rigden, Esq.; Dr. B. W. Richardson; and Edward Lund, Esq.

Among the principal Hotels, are—the Fountain; the Rose; the Fleur-de-Lys; and the Freemasons'.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 15th, 1861.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
METROPOL. COUNTIES. [Annual.]	Crystal Palace, Sydenham.	Tuesday, July 2nd, 3 P.M.
WEST SOMERSET. [Annual.]	Langport Arms Inn, Langport.	Wednesday, July 3.
CAMBRIDGE AND HUNTINGDON. [Annual.]	County Hospital, Huntingdon.	Wednesday, July 10, 2 P.M.
BATH AND BRISTOL. [Annual.]	Bristol Institution, Park Street.	Wedns. July 10, 3 P.M.

MEDICAL BENEVOLENT FUND.

The Annual General Meeting will be held on Tuesday, July 9th, 1861, at 3 o'clock P.M., at Mr. Churchill's, New Burlington Street, for the purpose of receiving the Annual Report and Financial Statement, electing the Committee, etc.

The South-Eastern Branch of the British Medical Association has recently forwarded a second donation of Ten Guineas to the Fund.

The North Wales Branch has just sent a donation of Five Guineas.

Correspondence.

IMAGINARY SPERMATORRHŒA.

Letter from R. Dawson, Ext.L.R.C.P.

Sir,—I think if you had waited for my reply, published in the *Lancet* of last week, to the charge contained in Dr. Chambers's Clinical Lecture, you would not have given insertion to the letter of M.D., Univ. Edin., M.R.C.S., L.S.A., in your Journal of 22nd of June.

I am totally unacquainted with the writer of that letter, unless it be a Mr. C——, who consulted me ten years ago, and who at that time was in the legal, and not in the medical, profession. Assuming that this is the same person, I never received a farthing from him after he became a medical student, although he frequently consulted me. By his own statement, it appears he was under my care from Oct. 1851, to June 1855; and, during that time, the whole amount of the fees paid to me was not more than £28. It was I who recommended him to study medicine, in order that he might satisfy himself that the view I took of his case was the correct one. He went to Edinburgh at my recommendation, and also to Germany. I have letters from him during his residence at both these places, which would shew the case in a very different light from that in which he now wishes to represent it. It is now two years since the same person commenced an action against me for the repayment of the £28 fees, which he dared not continue. At that time I was seriously unwell; and, although ordered to leave in October for Nice, I remained in England, at considerable personal risk, until January of last year, and would admit of no compromise of the case. Since that time I have not heard anything more from him or his solicitor, except, when the latter was applied to for his client's address, he stated that he did not know where to find him. Why, let me ask, if this person had any charge to bring against me, did he allow so many years to elapse before I heard from him? and why, if he could substantiate his charge, did he not proceed with his action, and not abandon it when he was confident of success? The facts speak for themselves, and require no comment from me. Who can be safe if, after the lapse of so many years, such disgraceful charges are permitted to be circulated, reflecting discredit and dishonour upon professional character and reputation?

I must appeal to your sense of justice, to insert my reply in your next publication.

I am, etc., R. Dawson.

15, Finsbury Circus, June 25th, 1861.

PROFESSIONAL INTERCOURSE WITH HOMŒOPATHS.

Letter from George May, jun., Esq.

Sir,—In 1858, the Reading Branch of the British Medical Association resolved that its members would "discountenance and cease to recommend those medical practitioners who were known to consult with homœopaths." It having been reported to me that Mr. Samuel Lane had consulted with a homœopathic practitioner in Reading, I shall feel obliged by your publishing the inclosed letter.

I am, etc.,
George May, jun.,
Hon. Sec. Reading Branch Brit. Med. Association.

Reading, June 25th, 1861.

"Dear Sir,—I beg to acknowledge the receipt of your letter, informing me of the resolution come to by the Reading Pathological Society on the subject of physicians and surgeons meeting homœopathic practitioners in consultation, and stating that my name had been mentioned as a surgeon who had done so.

"In reply, I beg to inform you that, in the course of last year, I was consulted at my own house by a patient residing in Reading, who was suffering from stone in the bladder. I was afterwards introduced by him to Dr. Guinness, as his ordinary medical attendant. I had no previous knowledge whatever of the latter gentleman. I visited my patient at Reading several times, and performed the operation of lithotrity. The case was treated by me in conjunction with Dr. Guinness; and the remedies which I thought it necessary to suggest were supplied in the usual doses, without any comment or objection on the part of either Dr. Guinness or of the patient. Nothing was said by either the one or the other, which could lead me to suppose that Dr. Guinness was in the habit of treating this or any other patient on homœopathic principles; nor had I the slightest suspicion that such was the case.

"I have always refused to meet homœopathic practitioners, and shall continue to do so; believing as I do that those who adopt a contrary course of conduct are guilty of a dereliction of duty to the patient, to the public, and to the profession.

"May I request you to lay this letter before the Reading Pathological Society, and to give it any kind of publicity that may be thought desirable.

"I am, dear sir, faithfully yours,
"Samuel A. Lane.

"1, Grosvenor Place, S.W., June 24, 1861."

HOMŒOPATHY IN VOLUNTEER COMPANIES.

Letter from John W. Hayward, M.D.

Sir,—In his letter in your Journal of the 15th inst., Mr. Bickerton says of the homœopathic medical officers of Liverpool volunteer corps that "had they possessed the honesty to declare their belief and practice....they would never have had the honour of serving in Her Majesty's forces"; and he deeply regrets "that the lord-lieutenant of the county should have been so much misled as even to sanction the very questionable propriety of submitting the name" of such to Her Majesty (!)

By the former expression he, of course, insinuates that they had the dishonesty to hide the nature of their belief and practice. Now this is a charge which I call upon him to substantiate, if he has the honour of a professional man. There are, I believe, only two homœopathic practitioners attached to the Liverpool volunteer service; and I can answer for one that his belief and practice were publicly and freely declared, and this declaration sent to the lord-lieutenant. His second charge is that the lord-lieutenant was "so much misled." Now, by whom was he misled? Mr. Bickerton ought to state against whom he makes this charge, that they may have the opportunity of clearing themselves of such imputation. I am sorry Mr. Bickerton should have lost his temper, as well as some patients, by these "irregular (!) practitioners."

He says further that "it is upon the individuals who forwarded the names of homœopathic practitioners to the lord-lieutenant that the odium should fall." Now, it was his own "liberal-minded and noble colonel, Wm. Brown," that forwarded the name, at least in one case, and that after the special declaration of the belief and practice of the party concerned.

He speaks of "coercion in the medical department of the brigade." What does he mean? and where is the coercion? against whom is this charge made?

He speaks too of "legitimate (!) medicine." What is legitimate medicine? In Italy it *is* bleeding Cavour to death; in England it *was* bleeding Byron to death, in the same way, under similar circumstances. What is it now? and what will it be next century?

He says it is "weak minded to serve in company with a homœopath." So the Italian physicians considered it to consult with an antiphlebotomist; thence the murder of Cavour. I am, etc.,

John W. Hayward, M.D., M.R.C.S., L.S.A.,
Hon. Ass. Sur. 66th Lan. R. V.

Vernon House, Liverpool, June 21, 1861.

[Our correspondent, in speaking of Byron, doubtless alludes to the bleeding which he sustained from the Jews and money-lenders in England. Of course, he is aware that Byron died in Greece. Editor.]

FEES OF ASSURANCE OFFICES.

Letter from R. Gillard, Esq.

Sir,—I forward you a letter from Mr. Francies, the manager of the North of England Branch of the English and Irish Church and University Life Assurance Society at Leeds.

In March last, I received from a patient three blank forms for medical reports, desiring that I would examine and report on three lives for the office mentioned. I did so, and sent the reports to the district agent, who thereupon sent me a guinea, saying it was for my medical reports for these three cases. I thereupon wrote to the agent, saying that the lowest fee I ever took was half a guinea for each examination and report. At the end of a fortnight, having received no answer, I wrote a second letter, reiterating my demand. At the end of a month I had an answer, saying that my first had been sent on to Mr. Francies, the branch manager at Leeds; but that *their office gave no more for two examinations* on a joint policy than for one. Obtaining no satisfaction, I wrote Mr. Francies a full account of the transaction, renewing my protest; saying that, if insurance offices choose to make such unfair rules, the least they could do was to give information beforehand to medical men; and I thought no respectable practitioner would undertake to act for them on such terms. Receiving no answer, I wrote him again, adding that, for the information of my medical brethren, I was about to publish a full account of the whole transaction in the British Medical Journal. This time I got an answer, which I inclose. I cannot but consider it a libel on my professional brethren. Most of the medical men in Leeds twelve years since I knew well, for at that time I was the resident medical officer of the Leeds Fever Hospital; and I cannot believe, without farther proof, that there are men who would take a half-crown fee for examining a life and reporting on it for life assurance. Mr. Francies even goes so far as to say that there are legally qualified men who *take shilling fees*. This I cannot believe. At any rate, I have never taken a less fee than half a guinea, and I do not mean to begin. I am, etc.,

R. Gillard.

Hovingham, York, June 11th, 1861.

The following is the reply of the manager of the English and Irish Church and University Assurance Society, Leeds:—

"The two small cases you examined were what we term industrial cases—viz., a joint life for £50, for which I sent you 10*s.* 6*d.* In Leeds, where our surgeons examine a large number of these industrial cases, we only pay 2*s.* 6*d.* each. Many offices only pay 1*s.* each; and the amount I sent was very nearly 25 per cent. on the first year's premium. In general business, we pay—Single lives, £100 to £500, 10*s.* 6*d*,; £500 and upwards, £1 : 1. Joint lives, £100, 10*s.* 6*d.*; £200 to £500, £1 : 1; £500 and upwards, £2 : 2."

[It is most unfair for the manager of an assurance office to offer less than the usual fee to any professional man, not their own medical officer, for examining a life for assurance. In manufacturing districts like Leeds, where so many small assurances are effected, it is clearly the duty of the directors to have the lives examined by their own medical officer, and to pay him a proper salary for the work done. Editor.]

ON LACERATION OF THE PERINÆUM.

Letter from Graily Hewitt, M.D.

Sir,—I beg permission to make a few remarks in reply to Dr. Gray's criticisms on my papers on the "Perinæum."

Dr. Gray appears to imagine that I assume the originality of the incision treatment in cases of impending laceration. I assume no such thing; as the following quotation from my paper will demonstrate:—"Experience has shown," I remarked, "that incisions thus made subsequently heal with great rapidity." The treatment is not peculiar to Scotland, and Dr. Gray is not seemingly aware of the fact that Dr. Blundell long ago recommended and practised the procedure in question.

I never said that Dr. Leishman was the *originator* of the idea of retarding the progress of the head by opposing the fingers inserted within the vagina directly against the fœtal head.

Dr. Gray considers that I have overlooked the point that every perinæum is not alike in its anatomical relations. I would call his attention to the following passage in my paper, which he appears to have overlooked:—"There are a few cases in which the condition of the vaginal outlet is such that laceration may be considered to be almost inevitable. I refer to cases where the vaginal outlet is *congenitally very small.*" (Brit. Med. Jour., p. 462.)

Dr. Gray's statement in reference to the main question do not come in the shape of argument, and, therefore, call for no reply. I am, however, at a loss to conceive how it is possible to "adopt a middle course" between supporting the perinæum and *not* supporting the perinæum, which is the conclusion Dr. Gray's remarks would lead the reader to infer that he has arrived at. I am, etc.,

Graily Hewitt.

36, Berkeley Square, June 23rd.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. The following gentlemen, having undergone the necessary examination, were admitted members of the College:—

Hounsell, Henry Strangways, M.D., Torquay
Latham, Peter Wallwork, M.B., Downing College, Cambridge
Morgan, John Edward, M.B., 9, London Street, Norfolk Square
Nichols, James, 13, Savile Row

UNIVERSITY OF DUBLIN. Degrees in Medicine conferred at the Summer Commencements of Trinity College, Dublin, held on June 26th:—

Doctors in Medicine.

Beatty, Thomas Berkeley
Cruise, Francis Richard
Dwyer, Henry L.
Sinclair, Edward B.

Bachelors in Medicine.

Ashton, Gough
Bolton, Abraham J.
Churchill, Alexander F.
Grimshaw, Thomas W.
McCready, Edward McConkey
Madden, John
Truel, Henry P.

Masters in Surgery.

Griffith, Richard
Grimshaw, Thomas W.
Montgomery, Howard B.

APPOINTMENTS.

ROYAL ARMY. The following appointments have been made:—

HUNGERFORD, Assistant-Surgeon R., 53rd Foot, to be Staff-Assistant-Surgeon, *vice* G. F. White.
LINDSAY, Assistant-Surgeon W., 30th Foot, to be Staff-Assistant-Surgeon, *vice* S. G. White.
MULOCK, Assistant-Surgeon J. J., 96th Foot, to be Assistant-Surgeon 1st Dragoons, *vice* Gibb.

The following appointments have been cancelled:—

BEALE, Assistant-Surgeon R. H., 53rd Foot, to be Staff-Assistant-Surgeon, *vice* G. F. White.
BICKNELL, Assistant-Surgeon H., 84th Foot, to the Staff, *vice* W. H. Jones, M.D.
LINDSAY, R. M. B., Assistant-Surgeon 39th Foot, to be Staff-Assistant-Surgeon, *vice* S. G. White, M.D.

ROYAL NAVY. The following appointments have been made:—

COLLINS. Alexander, M.D., Assist.-Surg., additional, to the *Hawke*.
ELIOT, John W., M.D., Staff-Surgeon, additional, to the *Hawke*.
TROUSDELL, John L., M.D., Assist.-Surg., additional, to the *Hawke*.

VOLUNTEER CORPS. The following appointments have been made (A.V.=Artillery Volunteers; R.V.=Rifle Volunteers):—

HIGGINS, C. H., M.D., to be Assist.-Surgeon 1st Cheshire Engineer Volunteers.
LIVINGSTONE, C. H., Esq., to be Surgeon City of Edinburgh Artillery Militia.

To be Honorary Assistant-Surgeons:—

FARR, S. B., Esq., 5th Hertfordshire R.V.
HEOINBOTHAM, E., M.D., 23rd Somersetshire R.V.
HUSSEY, J. T., Esq., 82nd Lancashire R.V.
ROBERTS, C., Esq., 3rd West Riding A.V.

BIRTH.

O'BRYEN. On June 25th, at 17, Thistle Grove, Brompton, the wife of *J. R. O'Bryen, M.D., of a son.

DEATHS.

ABBOTT. On May 15, at St. George's, Bermuda. aged 21, Jeannie, wife of C. T. Abbott, Esq., Surgeon 39th Regiment.
*CULHANE, Daniel, M.D., at Dartford, aged 47, on June 20.
DE QUINCEY, Francis J., M.D., in Brazil, on April 12.
FINCH, Charles D., M.D., late of Tulse Hill, at Heidelberg, aged 43, on June 13.
HUE, Clement, M.D., F.R.C.P., at 9, Bedford Square, aged 82, on June 23.
NASH, Frederick, M.D., of New York, at Bonchurch, Isle of Wight, aged 34, on June 19.
PALMER. On June 17, at Greenwich, aged 1 month, Helen May, daughter of H. R. Palmer, Esq., Surgeon.
QUIGLEY, Thomas H., M.D., in Dublin, on June 14.
RICHARDS, Joseph, Esq., Surgeon, at Islington, aged 61, on June 20.

HEAVY RAIN-FALL. During a heavy thunderstorm in Birmingham on June 20th, it is stated by Mr. Plant, that rain fell to the depth of 1·17 inches. This tremendous fall of rain is upwards of one-third of the average fall for the entire month of June for seven years, which is 3·06 inches. The storm began at 9 A.M., and lasted four hours.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. The following bye-laws were finally enacted at the Comitia Majora held on Tuesday, June 25th.—1. "Any Candidate who has already obtained the degree of Doctor or Bachelor in Medicine at an University, after a course of Study and an Examination satisfactory to the Examiners appointed by the College, shall be exempt from all parts of the Examinations hereinbefore described, except such as relate to the Principles and Practice of Medicine and Midwifery."—2. "It shall be lawful for the Examiners to recommend to the College that any Candidate for the Licence shall, for reasons to be fully stated in such case to the College, be exempted from any of the Regulations hereinbefore prescribed for admission into the order of Licentiates."—At this Comitia the following officers were elected for the ensuing year:—*Censors:* Dr. Copland, Dr. A. Farre, Dr. Chambers, and Dr. Monro; *Treasurer:* Dr. Alderson; *Registrar:* Dr. Pitman.

IRISH NEWS. The *Dublin Medical Press* of the 26th inst., has the following:—"BRITISH MEDICAL ASSOCIATION. Sir Charles Hastings has retired from the Presidency of this body, and Dr. A. Inglis has been elected in his place."—The same journal also speaks of us in this way: "In the same way is the British Medical Association itself edified by its chosen schoolmaster, the same newspaper squib or hoax being used with the same view by that functionary, to cultivate amicable relations in matters medical between the two countries. Under the head of 'Examples of Ignorance', we have another version of the same story retailed to the readers of the BRITISH MEDICAL JOURNAL in the usual strain of flippant vulgarity which is found so agreeable in that quarter."

THE MESMERIC INFIRMARY has had its annual meeting of friends and supporters. Mr. Monckton Milnes, M.P., presided. The report was most voluminous, 175 patients had been treated during the year. Many, however, had absented themselves after a few Mesmerisations, not having the means to attend. There had been increased support given to the infirmary. One of the members of the Council, Mr. Adolphus Kiste, had died during the past year. He was a great Mesmeriser, and his death was considered a great loss. Owing to the smallness of the funds, it was impossible to receive fifteen applicants who were waiting. The report further contained a number of instances where a cure or relief had been made by means of Mesmerism, in cases of epilepsy, neuralgia, stammering, rheumatic gout, insanity, etc. (!!) The Chairman stated that he felt the greatest interest in the system of the infirmary, and he trusted that before long the prejudices which were still harboured against it would be removed. The infirmary did not have, as was believed, patients for the purpose, as was shamefully circulated, to practise upon, but, by practical use of Mesmerism, to relieve the sufferers by physical means, employed discreetly and properly. He made some allusion to the treatment which it was stated the late lamented Count Cavour had received.

ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE. The National Association for the Promotion of Social Science having fixed their annual meeting this year at Dublin, from the 14th to the 21st of August, the President and Committee of the Association of Medical Officers of Asylums and Hospitals for the Insane, have determined to hold their annual meeting on Thursday, August 15th, at Reynold's

Hotel, Dublin, at one o'clock. The retiring President, Dr. Bucknill, will resign the Chair to the President Elect, Dr. Lalor, of the Richmond District Lunatic Asylum, who will deliver an address. The following gentlemen will be proposed as Honorary Members, viz.:—Dr. Nairne, Commissioner in Lunacy; Dr. Coxe, Commissioner in Lunacy (Scotland); Dr. Hatchell, Commissioner in Lunacy (Ireland); Prof. Laycock, University of Edinburgh. The dinner will take place at seven precisely, at Reynold's Hotel. Notice of communications, and of subjects for discussion at the annual meeting, may be made to Dr. Stewart, Belfast, Honorary Secretary for Ireland. The President and Committee invite the attendance of the Profession in Dublin. In accordance with the unanimously expressed opinion of the members, the President and Committee recommend that the annual meeting for 1862 (being the Great Exhibition year) be held in London in July.

INQUIRY INTO DEATHS FROM ANÆSTHETICS. Morton and his patented *letheon* seem to stand in the way of honest medical inquiry concerning the fatal effects of anæsthetics. Threatened on the one hand with legal prosecutions for using ether, and on the other hand being nervously anxious not to be again entrapped into an endorsement of the greatest of modern charlatans and impostors, the Chairman of the Boston Committee finds it necessary to promulgate the following notice and assurance. The practical importance of Dr. Hodges inquiries should elicit faithful replies to his circular.—"Boston, May, 1861. The undersigned, Chairman of the Committee appointed by the Medical Improvement Society of this city, to investigate alleged deaths from the inhalation of sulphuric ether, desires to assure the profession that the investigations of that Committee are not of a partisan character, and have no relation whatsoever with the so-called 'ether controversy.' As an impression exists at a distance from here that the circulars which have been so largely distributed by them have some connexion, either antagonistic or friendly, with the measures at present being taken in favour of Dr. W. T. G. Morton, this denial will, it his hoped, suffice to convince those gentleman to whom they have been addressed, that no ulterior motive is concealed, and that no use, other than that stated in the circular, viz., to prove or disprove the absolute safety of inhaling pure sulphuric ether, will be made of their replies. R. M. Hodges, M.D." (*American Med. Times.*)

NEGRO LONGEVITY. The *New Orleans Medical and Surgical Journal* gives the following instances of longevity, gathered from the census returns of 1860: Cornelia Leslie, a negress, aged 125 years, was born in Georgia; has a distinct recollection of the war of the Revolution. The woman, although so far advanced in years, is remarkably healthy and strong, and walks half a mile every Sunday to attend church. She is the slave of her own son, who is a free negro. Boubacar Labarre, born in Africa, died in New Orleans, aged 112. Lizzy Gray died at the age of 127. Her physician, in the Edgefield *Advertiser*, says, that "she was imported from Africa during the Revolution, after having borne four children in that country. She was educated in her youth under the influence of Mohammedan tenets, and although she united herself many years ago to the Methodist Church, she ever said that Christ 'built He first church in Mecca, and He grave was da.'" Gov. Blacksnake, the "old Indian," died at the advanced age of 123 years. He was probably, before his death, the oldest Indian living. He was in the French war previous to the Revolution; also in the Revolutionary war, and sided with the Americans. In the list of interments recorded by the sexton for the last week, was that of a centenarian, a negress, Milly Lamar, who had reached the advanced age of 145 years. This negress had been the mother of thirteen children, three of whom were born before the Revolutionary war. George, a negro of Virginia, died aged 120. A female slave of F. Hurtell, of Mobile, died aged 110.

DISREGARD OF THE LAWS OF HEALTH. Mr. Simon, the medical officer of the Privy Council, has made his annual report on the proceedings of the year 1860. One of the duties of the Council under the Public Health Act is to institute special inquiries in cases of local outbreak of disease, and give advice to the authorities on the spot with a view to remedial and preventive measures, and this course was adopted last year in several instances where leaky drains and cesspools infecting both water and air induced or fed typhoid fever, aggravated in some cases by defective ventilation in cottages with "windows made not to open." As an instance of what is still going on we take the case of Bedford, a town which has doubled its population within the last thirty years, and whose large school foundations make its healthiness a matter of unusual importance. Unhappily it is the autumnal habit in this town to suffer from typhoid fever; every year there are about thirty deaths from fever and diarrhœal diseases, implying that some hundreds of persons are attacked by them more or less severely. The cause was not found at all difficult to ascertain. In the valley of the Ouse, which flows through the town, there is a considerable deposit of porous alluvium, which contains soakage water—land water on its passage to the river; and it is this water that fills the wells of the town. But cesspools unfortunately are almost universal, and they are constructed so that the liquid may soak away from them rapidly into the surrounding soil, a local Act "forbidding the drainage of any cesspool matter into the sewers." The wells from which the inhabitants drink, mostly shallow, are frequently in close proximity to these cesspools. The sewers and drains, also, are described as not properly constructed, and in some instances of sewers at little depth, foul liquid filters through them into the cellars of houses, In short, almost the entire system of sewers, drains, and cesspools is one of percolation and saturation of the subsoil; and it is almost impossible, with the liquid refuse of 13,000 people constantly passing into such a limited body of water as is in these few feet depth of gravel, that any portion of the supply could escape more or less pollution. When Bedford would be charitable "a cup of cold water" is certainly not the thing it should give away. Specimens taken from three different wells were examined by Professor Miller, and he reported that they must have been derived "from a source largely contaminated with decaying animal matter." Mr. Simon remarks that, to any one conversant with medical science, it can only be matter of surprise that Bedford has not suffered more severely from the diseases which depend on excremental infection of air and water; but the importance of the case depends less upon the amount of illness that has been actually undergone than upon the danger still hanging over the population that, under not improbable circumstances, Bedford may suddenly become the seat of some very violent outbreak of disease. It is a striking example of the distance to which foul matter will travel through this porous subsoil, that the water in some wells 500 feet from the gasworks has been found so impregnated with soakage from gas-tar refuse as to be unusable; and it must be remembered that injurious matters in solution in the liquid of cesspools are not removed by filtration through gravel, however bright the water may become, and that typhoid fever, like malignant cholera, is one of the great group of diseases which infect the ground. Mr. Austin, the principal engineer of the Local Government Act Office, reports that nothing but a new and complete system of drainage and water supply will bring the town into a proper state, but that there would be no difficulty whatever in the execution of the works. Mr. Simon states that, at Christmas last, the Town Council had determined to appoint a committee of their body to report on the drainage of Bedford, but that no information had been received of the results of that measure.

OPERATION DAYS AT THE HOSPITALS.

Monday.......Royal Free, 2 p.m.—Metropolitan Free, 2 p.m.

Tuesday. .... Guy's, 1½ p.m.—Westminster, 2 p.m.

Wednesday... St. Mary's, 1 p.m.—Middlesex, 1 p.m.—University College, 2 p.m.—Royal Orthopædic, 2 p.m.

Thursday.....St. George's, 1 p.m.—Central London Ophthalmic, 1 p.m.—London, 1·30 p.m.—Great Northern, 2 p.m.—London Surgical Home, 2 p.m.

Friday....... Westminster Ophthalmic, 1·30 p.m.

Saturday..... St. Thomas's, 1 p.m.—St. Bartholomew's, 1·30 p.m.—King's College, 1·30 p.m.—Charing Cross, 2 p.m.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

Monday. Epidemiological, 8 p.m.: Dr. Archibald Smith, "On the Yellow Fever of the Peruvian Andes"; Dr. W. H. Duncan, "On the Fever on Board an Egyptian Frigate and on Shore at Liverpool."—Entomological.

Wednesday. Obstetrical, 8 p.m.: Dr. R. Uvedale West, "Is the Ergot of Rye when administered to the Mother during Labour dangerous or not to the Life of the Child? A Practical Inquiry."—Dr. Tyler Smith, "Four Cases of Ovariotomy."

Friday. Archæological Institute.

POPULATION STATISTICS AND METEOROLOGY OF LONDON—June 22, 1861.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week........................	Boys .. 882 Girls.. 867	1749	1077
Average of corresponding weeks 1851-60		1632	1119

Barometer:
Highest (Tu.) 29.930; lowest (Sat.) 29.682; mean 29.832

Thermometer:
Highest in sun—extremes (Sun.) 136 degs.; (Fri.) 110 degs.
In shade—highest (Wed.) 81.8 degrees; lowest (Tu.) 46.8 degs.
Mean—62.9 degrees; difference from mean of 43 yrs.+3.3 degs.
Range—during week, 35 degrees; mean daily, 23.8 degrees.

Mean humidity of air (*saturation*=100), 83.

Mean direction of wind, N.E. and S.E.—Rain in inches, 0.15.

TO CORRESPONDENTS.

*** *All letters and communications for the* Journal, *to be addressed to the* Editor, 37, *Great Queen St., Lincoln's Inn Fields, W.C.*

Correspondents, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

In consequence of the space occupied by the Index, the reports of the North Wales Branch meeting and of the Obstetrical Society, with several other articles, are unavoidably deferred until next week.

Mr. Paget and the College of Surgeons.—Sir: Pray permit me, through your Journal, to call upon all provincial Fellows of the College to support Mr. Paget of Leicester as a candidate for the Council of the College of Surgeons. He is a man in every respect admirably fitted to represent the interests of the Fellows. I am, etc., F.R.C.S.

S. T.—The resolution referred to by our correspondent concerning non-professional intercourse with homœopaths, was (as we are informed) passed by the Reading and other Branches of the British Medical Association, on the occasion of a reported professional consultation between Mr. Fergusson and a notorious homœopath.

The Cæsarean Section.—Dr. Radford of Manchester writes: "I have retired from practice; but still I take great interest in the profession. The Cæsarean operation, craniotomy, etc., as many former numbers of the Journal can testify, have engaged my attention. I think that the life of the infant *in utero* is held of too low value by British obstetricians, not only in cases of death of a pregnant woman, but also during labour. I am very glad that you devote your leading articles to subjects of physiological and practical interest. There are debateable questions in all the departments of medicine, and to try to settle them is a most desirable object in a journalist."

Mr. Fergusson and Consultation with Homœopaths.—A F.R.C.S. writes to us as follows, *apropos* of a letter which lately appeared in our pages. "I trust that Mr. Fergusson will be able to clear himself satisfactorily to the profession, or I fear he will stand a bad chance at the ensuing election; and I should be sorry to find such an ornament to our profession excluded from its Council by what may only have been a little indiscretion on his part."

H. G.—A correspondent, signed Obstetricus, makes an important mistake in the last number of the *Medical Times and Gazette.* It should, I think be pointed out. He has misunderstood Naegele. Instead of Naegele's telling us to subtract three months and eight days, he tells us to subtract three months and add seven days. The following are Naegele's words:—"Von der letzten Reinigung an lässt sich beiläufig die Zeit der Niederkunft auf folgende Weise ohne Kalender leicht Tage berechnen. Man rechnet von dem Tage an, wo die Reinigung zum letzten Male sich eingestellt hat, 3 ganze Monate zurück, und zählt dann 7 Tage hinzu; der so gefundene Tag ist alsdann derjenige, an welchem die Niederkunft zu erwarten ist." (Naegele, *Lehrbuch der Geburtshülfe für Hebammen*, p. 90.)

A Subscriber.—The boards for binding the Journal of 1860 can be obtained at the office.

SUBSCRIPTIONS.

The following Laws of the Association will be strictly enforced:—

15. The subscription to the Association shall be One Guinea annually; and each member on paying his subscription shall be entitled to receive the publications of the Association of the current year. The subscriptions shall date from the 1st of January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous. If any member's subscription remain unpaid twelve months after it shall have become due, the publications of the Society shall be withheld from such member until his arrears be paid.

16. The name of no member shall remain on the books of the Association, whose arrears extend over three years; but the omission of the name from the list of members shall not be deemed, either in honour or equity, to relieve any member from his liability for the subscriptions due for the period during which he has availed himself of the privileges of membership.

Philip H. Williams, M.D., *General Secretary.*

Worcester, June 1861.

Communications have been received from:—Mr. Augustin Prichard; Dr. G. M. Humphry; Mr. R. S. Fowler; Mr. Henry Thompson; Dr. Gillett; Mr. D. K. Jones; Mr. G. May, jun.; Mr. T. T. Griffith; Dr. Graily Hewitt; Mr. W. Self; Mr. A. B. Steele; Mr. Wm. Copney; Mr. C. J. Evans; Dr. Laycock; Dr. F. R. Cruise; Dr. Dawson; and Dr. J. B. Pitt.

BOOKS RECEIVED.

1. Graduation under the Medical and Scottish Universities Acts; with some Account of the Origin of Universities and Degrees. By Robert Christison, M.D. Edinburgh: 1861.
2. On the Time and Manner of Closure of the Auriculo-Ventricular Valve. By George B. Halford, M.D. London: 1861.
3. On the Relative Influence of Nature and Art in the Cure Syphilis. By Thomas Weeden Cooke. London: 1861.
4. Notes Exemplifying the State of the Medical Profession, comprising some Account of the Mismanagement of St. George's Hospital. Third series. By Edwin Lee, M.D. London: 1861.

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